

ECONOMICS

Principles and Problems

THIRD EDITION

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ECONOMICS: PRINCIPLES AND PROBLEMS

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PART SIX

The Mechanism of Exchange

The Process of Exchange

The Relation of Specialization to Exchange. In primitive industrial society people made goods chiefly for their own consumption. Under conditions of modern specialization an individual has no intention of consuming all, or even most, of his product. A specialist works with the deliberate idea of producing more of a given commodity or service than he himself will consume, so that he may exchange this excess for other commodities and services which have been created by other producers.

The farmer cannot consume all of the food products he raises, the tailor cannot wear all the clothes he makes, the contractor has no idea of occupying all of the houses he builds, nor has the surgeon a personal use for the large number of operations that represent his contribution to production. But these producers, who of course are specialists, have a definite desire for other commodities and services; and so, in effect, they take their surpluses of food, clothing, houses and surgical operations to other people, who give them in exchange shoes, automobiles, theatrical performances, and other economic goods which they desire.

Difficulties of Direct Exchange. We have, then, exchange going hand in hand with specialization. Specialization would be out of the question without exchange, and exchange could hardly exist without specialization. The means by which exchange of commodities and services is effected are of several kinds. First of all is *direct exchange* or *barter*, which is the type resorted to in simple stages of economic society and which consists of trading goods for goods.

But barter becomes extremely inconvenient as specialization increases. Imagine, for example, the difficulties encountered by an instructor in economics who is trying by direct barter, instead of by money exchange, to convert his specialized services into other services and commodities. This teacher of economics, needing a suit of clothing, goes to a tailor, who is also a specialist, and offers to exchange five hours of economics for one suit of clothes. But if the tailor should not be interested in economics, our instructor would not be able to make a trade; and he might have some trouble in locating a tailor who would be willing to exchange clothing for training in economic principles. There is always a danger, then, that in direct barter one of the parties in question will not care to receive what the other has to offer.

There is also the difficulty, in our illustration, of determining just how many hours of economics should be given in exchange for a suit of clothing. Perhaps one hour given by a master of the subject would be sufficient, whereas it might take a dozen hours of teaching by one who knew less of economics. The tailor, in our example, would probably not be able to decide the true value of the service which the teacher is offering, whereas the head of an economics department in a large university could appraise this particular service much more satisfactorily. Certainly the tailor would hardly be prepared to express the value of suits of clothing in terms of the many different kinds of economic goods that would be offered him under conditions of barter.

Or suppose that our instructor wishes to buy not a suit of clothing but a plate of ice cream. Shall he offer to the ice-cream dealer (say) two minutes of economic teaching? This would seem at first thought to be absurd, and yet he could scarcely afford to give more than two minutes in exchange for the ice cream, if his time were as valuable under a system of barter as it appears to be in a money economy. And, of course, the amount of good which the ice-cream dealer would derive from a discussion of that length would probably be almost nil.

There is the further fact that the services of this instructor must be used day by day if they are to be of any good. It is impossible for him to save up his teaching for a month, and then dispose of it all in one day as he might with material goods. Consequently, we may say that his services are perishable; and this is true not only of services but also of many kinds of material goods throughout economic society.¹

Advantages of Indirect Exchange. Because of the inconvenience of barter exchange and the impossibility of carrying it on satisfactorily, we now usually employ either *money exchange* or *credit exchange*. In money exchange, the instructor of our illustration is paid in (say) dollars, and then, with each of these dollars or portions of dollars, he purchases from someone else those things which he needs for his comfort and well-being. Money is in effect a common denominator to which we reduce all commodities and services. Its conveniences are many, as we shall note in our discussion of money in the next chapter.

One of the greatest of these conveniences lies in the fact that money will be readily accepted by all members of an industrial society. Our instructor has no difficulty at all in getting the tailor to accept money in exchange for a suit of clothing, since the tailor may readily exchange these dollars for things which appeal to him more strongly than economic training. The instructor's difficulty of splitting up his specialized service

¹ An interesting example of modern exchange by barter is afforded by the Barter Theatre, of Abingdon, Virginia, to which admission may be gained by persons who present, at the box office, bread, cakes, fruit, vegetables, fowls, dairy products, and other commodities that are acceptable to the management.

into portions small enough to buy the plate of ice cream easily has also disappeared. Instead of a few minutes of economic discussion, he pays the dealer fifteen or twenty cents from his money income. The number of transactions of these kinds which are daily taking place results promptly in the establishment of definite prices, expressed in terms of money, for all commodities and services. Thus, there is no difficulty in finding out how much the instructor should give for the suit of clothing. The price has already been established at, let us say, \$50.

Finally, there is no need for the instructor to search for sellers who are willing to accept economics for their goods, since he may dispose of his services at a central point, a college or university, to which come buyers anxious for this particular service. In the absence of money exchange, it is entirely possible that these students of economics, eager for knowledge of the subject, would come to the university prepared to pay for their instruction in potatoes, farm machinery, street paving, medical service, and other kinds of desirable commodities and services which, however, would not be needed or accepted by the instructor. But in a money economy, they pay their tuition in dollars, some of which the instructor receives in payment for the service he renders.

Credit Exchange. Money exchange is a form of indirect exchange, in contrast to barter or direct exchange. A second type of indirect exchange is that which is carried on by means of credit. In recent years the amount of business transacted by credit has increased tremendously. Money exchange consists of giving money in return for commodities or services, whereas credit exchange consists of giving in return for commodities and services a promise to pay at some future date. The principle, of course, is precisely the same. When money is paid for a certain article the seller receives immediate purchasing power which he may use today if he likes. The only difference in credit exchange—that is, when a promise to pay at a future time is given—is the postponement of the actual transfer of purchasing power until the date stipulated in the agreement. Even this distinction is less important than at first sight it might seem to be, because in many instances it is possible for the seller of goods to convert the credit immediately into purchasing power by selling it to someone engaged in a particular line of economic activity—that is, in the purchase and sale of credit instruments such as promissory notes, or promises to pay. Nevertheless, credit exchange is in the nature of an incomplete transaction, since only half of the exchange has taken place, the other half remaining to be performed at another time.

If a farmer should buy an automobile, giving in payment tons of hay or bushels of wheat, he would be engaging in barter, or direct exchange. If he should pay cash for the car, it would be a case of money exchange, one type of indirect exchange. If he should get possession of the car by

signing a contract in which he agreed to make twelve monthly payments covering the amount of his purchase, it would be an instance of credit exchange, a second type of indirect exchange.

The Use of Money in Exchange. There is one point in relation to money which must be borne in mind throughout the entire study of economics. It has been mentioned before, but can scarcely be overemphasized. This is that money is essentially a means of exchange, and that ordinarily it is not desired for any purpose other than to exchange it for something else. If, for instance, the instructor in our example receives \$100 a week, this money is meaningless except as it provides the means to secure the economic goods he wants. In all probability, he would work without a money salary if he were guaranteed the commodities and services essential to a good standard of living. And the *number* of dollars he receives is likewise of no significance, except as it is translated into purchasing power. He would just as soon have \$50 a week as \$100, if the \$50 would buy as much in the way of commodities and services as the \$100 would buy. People do not desire money for the sake of the money itself, but for what it will buy.

These observations are made simply to emphasize the point that what men do is deliberately to create surpluses of commodities and services which, in the final analysis, they exchange for commodities and services created in surplus by other producers. Most of our economic thinking will be simplified if we can forget that money is ever resorted to in economic transactions. There are times, of course, when our economic reasoning relates to money, but in most instances (as we have observed before) it has to do with commodities and services.

The Gainers Through Exchange. The question frequently arises as to who benefits when an exchange takes place. If, for example, I trade a fountain pen for a pocket knife, do I or does the other trader win? The answer is that in every free trade both parties expect to gain and ordinarily do gain. Having voluntarily given up the fountain pen in exchange for the knife, it is obvious that I am getting something which I would rather have than the thing I give up. The same remark applies to the other party in the trade.

If, however, I should conceal the fact that the fountain pen leaks, or if the other party professing to trade a good knife in reality trades one which has a broken blade, one of the traders may get the worst of the bargain. This, however, is not a trade but a swindle, since the true condition of the pen and knife was not set forth before the transaction took place. This question of exchange will arise again in connection with our discussion of international trade. For the present, it is enough to say that exchange consists of giving up things which are desired less by the person relinquishing them than are the things which he receives in return.

SOME AGENCIES OF EXCHANGE

In direct exchange, or barter, the surpluses of some producers are exchanged for those of others, in order that they may be consumed by persons for whom they have greater utility than they have for the original owners. In indirect exchange, likewise, the problem involved is the transfer of economic goods from the original producer to the ultimate consumer.

Owing to the great size and complications of our modern economic society, this transfer is sometimes a very involved process and requires the assistance of many intermediate agents. The process is often referred to as the "distribution of goods"; and there is no objection to the use of this term, provided only it is not confounded with the "distribution of income" which (as we have seen) has to do with the division, among the owners of the factors of production, of the economic goods or "product" which these factors have jointly made.

Functions Performed by Agencies of Exchange. The parts played by the several agencies of exchange may be made clear through the use of an illustration of comparatively simple exchange. A Virginia apple grower has picked and barreled his season's crop. He has, let us say, 5000 barrels of apples to dispose of. How shall he get them into the hands of the consumers? Clearly not by direct exchange, for the delivery of small quantities of apples to many thousands of housewives would be expensive and hopelessly drawn out. Several better methods are open to him. We may suppose that he has decided upon a plan often followed by fruit growers, that is, to retain ownership of the fruit until spring, when prices are likely to be higher than in the fall, and then to dispose of the crop through a commission house.

But this is an arrangement in which he requires assistance. He calls upon some of the agencies of exchange for help. *Form* utility the farmer has already created, but *time*, *place*, and *possession* utility must be added before the apples are available for the consumers, that is, before they have been *completely produced*. Lacking storage facilities of his own, our farmer arranges with a storage concern in Washington to hold the 5000 barrels of apples from September until April. Thus time utility is created, for the apples will be more desired in April than in September, owing to the greater scarcity of the fruit in the spring months.

But the crop must be transported from the farm to the storage house; and this necessity entails, first, a transfer by truck to a nearby railway station, then a railway shipment to the city, and finally another transfer from the Washington freight depot to the storage plant. Each of these three steps in the journey, which may or may not have been performed by separate agents, adds place utility to the product, for the apples have made progress toward the ultimate consumer.

Having running expenses to meet, such as wages of labor, taxes, and

so on, the farmer secures from his banker a loan to carry him over until the sale of the apples in the spring brings him an income. Since an immediate sale of the crop in the fall would have been necessary had the loan not been forthcoming, the banker must be credited with a part in promoting the storage; that is to say, he has aided in the creation of time utility. Moreover, the crop itself or the building in which it is stored (or both) will ordinarily be insured, so that the insurance company also is entitled to some credit in connection with time utility.

With the coming of spring, the apples are delivered to a commission merchant, sold by him to wholesalers (perhaps in hundred-barrel lots), thence to the retailers by the barrel, and finally to the consumers by the half- or quarter-peck. The commission man, wholesalers, and retailers are all merchants, and every transaction they carry on constitutes a creation of possession utility since each sale brings the product closer to its final destination, which is its possession by the consumers. It is probable that, in connection with these several sales, new place utility also was added, since a sale would usually involve the physical transfer of the goods also, in the case of a commodity such as we are now considering. (It would not be true, of course, in the sale of land—and other examples could be cited.)

In the case of many commodities, the goods would be advertised—another contribution to possession utility. Or they might be bought by speculators in anticipation of an advance in price, which would be an addition of time utility. Very important throughout the whole process is the use of money and credit, which will be described in detail in later chapters. These various agencies of exchange, it may be said, would find little or nothing to do in a primitive society, but it is inconceivable that an extensive economic order, such as we have today, could be carried on without their assistance.

Exchange, Marketing, Distribution. The activities included in the “young profession of marketing”² are essentially the same as the functions of exchange outlined above, as may be seen by reference to any of the standard textbooks on the subject.³ The “marketing functions” stressed in these books are (1) “those involving transfer of title,” which are the equivalent of the theoretical economist’s *possession* utility, and (2) “those involving physical supply,” with special emphasis on transportation (*place* utility) and storage (*time* utility). The terms “exchange” and “marketing” may therefore be used interchangeably, with little if any loss of accuracy; and to these two may safely be added a third, synonymous term—“distribution”—provided only that this distribution of *goods* is not confused with the distribution of *income*.⁴

² *Annals of the American Academy of Political and Social Science*, May, 1940, p. xi.

³ E.g., C. F. Phillips, *Marketing*, Boston, Houghton Mifflin Company, 1938; P. D. Converse, *Essentials of Distribution*, New York, Prentice-Hall, Inc., 1936.

⁴ Cf. chaps. 18 to 23 (vol. 1).

Costs of Exchanging Goods. A great deal has been written about the high cost of exchanging, marketing, or distributing goods; and this cost is said to result, in turn, in the high cost of living. It is sometimes urged that the existence of large numbers of "middlemen," each demanding his share of income, needlessly increases the selling prices of many commodities.

The Twentieth Century Fund has made an extensive study of the cost of *distributing* economic goods, as compared with the cost of *producing* them in the first place.⁵ These investigators began by grouping together, as "production," all activities going into the creation of form utility, and as "distribution" the efforts involved in the creation of place, time, and possession utility. Allocating the 66 billion dollars spent for finished goods in 1929, they found that production cost 27 billion and distribution 39 billion dollars. This means that, on the average, approximately 40 per cent of the money spent that year for finished goods went to the producers while almost 60 per cent went to the distributors.

An average of this sort admittedly conceals many and wide differences in *production* and *distribution* costs as between commodities. In general, as is shown by data for more recent years, it costs more to get foodstuff to the ultimate consumer than to distribute manufactured goods. For example, the study of the Twentieth Century Fund indicates that distribution costs in the past decade accounted for the following proportions of retail prices of the goods listed: Cabbage, 82 per cent; carrots, 82 per cent; oranges, 73 per cent; shoes, 48 per cent; gasoline, 56 per cent;⁶ and cigarettes, 52 per cent.⁶ But the distribution costs of foodstuff are sometimes low (for example, 34 per cent for eggs), and those for manufactured goods are sometimes high (as in the case of rye whiskey, 79 per cent).⁶

It is the publication of figures such as these that arouses discussion as to whether we are not paying too much for the transfer of goods from the farm or manufacturing plant to the consuming public. The question is more easily asked than answered. The distribution costs of many commodities do seem to be disproportionately large. But if they are so in reality, why do not more capable business men enter the field, eliminate the wastes of distribution—if there are wastes—and thus undersell our present-day enterprisers? In some cases, the attempt is being made with varying degrees of success. But the benefits of "manufacturer-to-consumer" exchange are often more attractive in prospect than in practice.

The fact is that the consumer cannot, with any degree of satisfaction, deal *directly* with the manufacturer. If goods are to be manufactured cheaply, they must usually be made on a scale vastly larger than would be necessary to meet local needs alone. Some consumers, then, are too

⁵ See Paul W. Stewart and J. Frederic Dewhurst, *Does Distribution Cost Too Much?* New York, Twentieth Century Fund, 1939.

⁶ Taking no account of taxes on the commodity.

remote to be able to buy at the factory. And if they purchase through stores set up by the manufacturer, they are still, in effect, buying from a retailer (a distributor), even though the shop bears a manufacturer's name.

Unquestionably there is waste in distribution just as there is in the earlier stages of production, and perhaps even to a greater extent; and in both instances it should be done away with as thoroughly and speedily as possible. But there is a tendency to underestimate the services rendered by our agencies of exchange. It is easy enough to see that the baker is a productive agent. It is more difficult to give full credit to the truckster who hauls bread, and the grocer who sells it over the counter, simply because they are not creators of form utility. But the promptness and convenience with which one may secure bread depend upon the services rendered by the truckster and grocer quite as much as upon the productive effort of the baker.

The laborer is worthy of his hire, and the distributor who performs a necessary function is entitled to payment. Without him, specialization as we now have it would be impossible. Perhaps the best evidence of his usefulness—though far from conclusive evidence—is our inability thus far to oust him, even though we recognize that prices are high and may suspect that the middleman is in some way responsible.

TWO ECONOMIC FALLACIES

Two misconceptions relating to exchange may be discussed briefly at this point. The first of these is referred to as the "keep money at home" fallacy, and the second is the "make work" fallacy.

"Keep Money at Home" Theory. The idea that money should be kept at home rather than spent abroad is one which has been inherited from theorizers of the past. The falsity of the theory has been demonstrated time and again, and yet there are today business men, politicians, and others who apparently believe implicitly in its soundness and who argue vigorously in its defense.

The theory is usually expressed in about these terms: People of a given community—whether a town, a state, or a nation—should buy goods at home instead of bringing them in from the outside. By buying goods at home, home industries are encouraged, local business men prosper, there is plenty of employment for workers, and, as a consequence, prosperity for all. But if goods are purchased away from home, there is a lack of business for the home industries, and consequently a lessened demand for workers in local shops and factories.

This is the way the argument runs, but students who have followed carefully the line of reasoning in our discussion of exchange will realize that the "keep money at home" theory is a fallacious one. Buying goods means giving money, or purchasing power, in exchange for commodities

or services. And the person who receives this purchasing power will use it, in turn, to buy commodities and services which he desires. In other words, every time we buy economic goods we engage in a trade, although it is more often indirect trade than direct barter. In every free trade, as we have seen, both parties benefit. It is obvious that we gain most when we spend our money where we get for it the greatest possible return in the way of commodities and services. If a distant merchant gives more or better goods than the local merchant for the same money, or the same goods for less money, certainly it is foolish for buyers to purchase their goods locally. If local industries are not able, in the long run, to compete with industries at a distance, then it would be economical to allow them to pass out of existence, since they have shown an inability to survive in the face of competition. Indeed, every plea to keep money at home is a confession of weakness on the part of those making the plea, for money will stay at home without urging if only it can be spent there as advantageously as away from home.

An interesting side light on the "keep money at home" theory is that those who preach it loudest frequently practice it least. The campaigns that dilate upon the dire consequences that will follow upon buying away from home are usually financed largely by the merchants of the town. But do these same merchants buy locally and thus keep money at home? Sometimes they do, to be sure, but only when local manufacturers and wholesalers will sell to them more cheaply than the manufacturers and wholesalers of other cities. In other words, they exhibit a pronounced tendency to do precisely what the consumer is inclined to do—that is, to spend their money where it will bring them the largest quantity of economic goods per dollar of expenditure. All they ask, of course, is to be allowed themselves to send money away from home and bring in goods which they can sell, at an ample profit, to people whom they have "educated" to think it disloyal and unpatriotic and—most perplexing of all!—uneconomic to buy anywhere but in the old home town.

Let us examine, for a moment, a town in which this fallacy has made no headway, and see what is happening in the way of exchange. Goods are being made in this town, but they are goods that the town is equipped to make advantageously. They are goods, therefore, that can to some extent be sold locally without recourse to methods of high-pressure salesmanship, since they are reasonably priced. But they can be sold also—and probably are sold chiefly—in other towns, again because they are made advantageously and the price is therefore low as compared with the prices of similar goods made less advantageously elsewhere. As finished goods move out of town, money flows in to pay for these goods, but some of this money flows promptly out again in payment for raw materials which must be brought in as the basis for more finished goods. People working in factories buy some goods at local stores; possibly they spend part of their

wages with Sears, Roebuck and Company or Montgomery Ward and Company, and thus *send money out of town*. But at the same time their employers are selling commodities that these people have helped to make—to Sears, Roebuck and Company, or Montgomery, Ward and Company, or some other out-of-town dealer—and thus *money is brought back into town*. Through these and similar transactions, money flows back and forth. If it goes out, it just as surely comes back again; and every time it facilitates an exchange between two parties, each of whom is performing some economic act that he is especially well fitted to perform, the money serves, as someone has well said, as a lubricant to the economic machine.

Keeping money at home means doing business only with the home folk, and not with those outside the community. Any group that adopted such a policy rigidly would, of course, be self-sufficient, and it would be bound to suffer in two ways. First, it would have to get along without some kinds of goods that it would like to have, since no community has yet been able to supply itself with everything it needs and wants, without assistance from other communities. Second, it would have to get along with smaller quantities of goods, since it would be making disadvantageously some goods which, had it not chosen isolation, it could buy cheaply from other communities equipped to make these same goods advantageously. It is very likely that such a community would have *more work to do* than before, but it seems quite certain that it would have *less of economic goods*. Anyone, then, who supposes that the goal of economic society is the *creation of work* is carrying his ideas to a logical conclusion when he advocates keeping money at home; but no one who thinks of the *creation of goods* as the goal should have difficulty in seeing that this goal is more quickly and more completely reached by cooperation between communities than by each community trying to be independent of every other community.

The people of a community as a whole are not injured by sending out money and getting commodities and services in exchange, though some individuals may suffer and be compelled to turn to new fields of production. The fact that money is spent indicates that the spenders are getting for it something which they prize more highly than the money itself. The fact that it is spent *abroad instead of at home* shows that local sellers offer less in exchange than sellers at a distance. All that happens is that money goes out and commodities and services come in—more commodities and services than the community would have, had the money stayed at home by being spent there. In other words, there is released from the home town money which has no significance except as it is exchanged for goods, material or non-material; and there are brought into town economic goods which are capable of being consumed immediately or in the future, and which therefore yield genuine satisfaction.

Nevertheless, we are constantly admonished to patronize the neighborhood druggist, to support local merchants instead of mail-order houses,

to buy articles manufactured in the home city, and to use goods made in the United States rather than those manufactured abroad. Political campaigns are sometimes waged on the basis of a protective tariff. And yet a tariff of this kind is simply an artificial means designed to force people to buy goods at home, rather than get them from a foreign country where the goods could be had more cheaply.

"Make Work" Fallacy. The second error into which many persons fall has been termed the "make work" or "lump of labor" fallacy. The theory here is that there is only a certain amount of work to be done in a community, and it should be spread out so as to keep all workers employed. If people are out of employment, it is thought by some that the wise thing to do is to create work so that they may be employed. If, for example, men are idle in the winter time, it is regarded as a great blessing to have a heavy fall of snow so that these men may be able to earn an income.

From the economic point of view, it would be much better, of course, to put them to work shoveling dirt in the building of a subway instead of clearing snow from the sidewalks. If it is desirable to supply work to unemployed men at all costs, one could easily justify the deliberate destruction, by fire, of all, or a large part, of the buildings of New York, Chicago, or Philadelphia. An action of this kind would provide an abundance of work for builders of all types, and would be just as sensible as praying for snow in order to give employment to the unemployed; and yet there are few who would be so rash as to suggest that the kindling of such a fire would be desirable.

The "make work" fallacy is one which is said by some students of labor problems to be an actuating force among labor unionists. Some unions definitely set an amount of work to be done in a given time. Although labor leaders usually deny the charge, it is true that workers have sometimes decided that just so many bricks may be laid in a day, or so many cigars, and no more, manufactured in a given number of hours. A restriction of output of this kind is often caused by fear on the part of the workers that there will not be enough work to go around. Consequently, to make their work last longer they do less of it each day, although demanding, of course, a full day's pay. In like manner, they oppose the introduction of labor-saving machinery on the ground that it would reduce the amount of employment available for hand workers.

Those who hold and express the opinions outlined above either have a mistaken notion of what exchange really is, or are arguing from the short-run point of view. The error arises through overlooking the fact that whenever commodities or services are created, they themselves constitute the purchasing power with which other commodities or services may be obtained. If, then, the unemployed got busy and made some article which the general public wanted, that article could be exchanged for the things which they themselves need. And, since human wants are capable

of practically indefinite expansion, there should be plenty of opportunity for productive work, runs the argument. The difficulty, however, lies in *getting the opportunity* to make the thing which others are willing to buy. Since industry is conducted on a basis of workers employed by manufacturers and others, the workers are dependent upon employers for an opportunity to make those articles which can be exchanged for the commodities and services necessary to their well-being.

But employers will not manufacture such goods unless there is a demand for goods of this type; and oftentimes articles of a particular kind are manufactured in larger quantities than the actual demand warrants. As a result of an overproduction and accumulation of automobiles or radio sets, factories devoted to the manufacture of goods of these kinds may temporarily be closed down. This is exactly what happened in the Ford plant and other automobile factories some years ago. It is frequently said that there can be no such thing as *general overproduction*, since the wants of human beings are unlimited. But there can certainly be *more goods of a given kind* manufactured than will be taken from the market at a price sufficiently high to cover all costs of production, owing to the fact that manufacturers sometimes overestimate the demand for a particular type of goods. The word "demand" is here used to include not only the desire for an economic good, but also the possession of sufficient income to permit its purchase.

Whenever a man produces a good *which other people want and can afford to buy*, he creates purchasing power. For he can take his good and exchange it for some other commodity or service; and in so doing he, in effect, *purchases* something with the good he has made. It follows that there can never be overproduction so long as he and others produce the right kinds of goods, and each in the right quantity. When, a number of years ago, cheap automobiles were for several months a drug on the market, the situation did not arise from too much production, but from too great production of low-priced cars. If the productive power used in manufacturing the surplus stock of cheap cars had been turned into the manufacture of, say, a strikingly new and advanced model, this new car would probably have sold in fairly large quantities to persons of wealth. Until human wants have been completely satisfied, there can be no such thing as *general overproduction*, though, as we have seen above, there may be and often is *misdirected production*—that is, the production of more goods of a certain kind than people wish to possess or are able to buy.

But fine distinctions between general overproduction and misdirected production are not likely to interest a worker who is confronted by a concrete problem which may be expressed in the form of the question: "Where can I secure employment?" Though, from the social point of view, there is no economic justification for stretching out a task, yet from the practical, individual point of view no further justification is needed

than the fact that if the worker proceeds at a goodly pace, he will soon be out of a job, whereas, if he restricts his output, he may have steady, continuous employment. Furthermore, the shovelers of snow in our illustration are amply justified in giving thanks for the jobs that have been sent them; for, though the snowstorm has brought no economic gain to society as a whole, these individual workers have been enabled to secure purchasing power which may be the means of warding off starvation.

Of course, if all workers in society were to increase their efforts and, as a result, their output, there would be more commodities and services for all, and the scale of living of all members of society could be raised. Moreover, there would be no difficulty in finding a demand for the additional goods, provided care were taken to produce the kinds of commodities that were wanted, since (1) human wants are far from being completely satisfied, and (2) every good produced constitutes in itself a demand for other goods. For example, if production of all kinds were doubled, a cigarmaker who now owns an automobile could have a second car or, if he preferred, could have in its stead a host of other less costly items, such as a radio set, a dress suit, a vacation at the seashore, and so on. These additional commodities and services would be his reward for having doubled his production of cigars.

But the scheme would work equitably only if there were a *general* increase in production. If only the cigarmakers were to double their output, the effect would be a much lower price for cigars, and smokers would benefit correspondingly. But there would be no gain for the cigarmakers, since the goods which they buy would not have increased in quantity and therefore would not have gone down in price. Consequently, though it is quite true that each of us *should* produce as much as possible, there is no assurance of personal benefit unless there is a general movement in the direction of maximum production. From the purely selfish point of view, restriction of output may often be a wise practice to follow.

And so, in applying the label "economic fallacies" to certain theories or ideas which seem to involve unsound reasoning, we should bear in mind the fact that these theories, while fallacious from the point of view of economic society as a whole, and in the long run, may be entirely sound, as looked at by the individual business man or worker, and considered as short-run phenomena. Since self-interest is a familiar characteristic of present-day economic society, it is not surprising that individuals sometimes follow courses of economic action which seem likely to benefit them in a material way, even though they do so at the expense of the general public. There is no lack, in current economic life, of examples of conflict between individual and social interest.

1. It is said that exchange goes hand in hand with specialization. Explain the relationship between the two.
2. Why would it be difficult, if not impossible, to carry on present-day exchange by means of barter?
3. In what ways does indirect exchange solve the difficulties connected with barter?
4. Money is referred to as "a common denominator to which we reduce all commodities and services." How does money as "a common denominator" facilitate exchange?
5. Distinguish between "money exchange" and "credit exchange."
6. Classify "barter," "money exchange," and "credit exchange" as, respectively, *direct* or *indirect* exchange.
7. "People do not desire money for the sake of the money itself." Explain.
8. How is it possible for a gain to be realized by both parties to a trade?
9. In modern economic society, exchange is sometimes a very involved process. Name some "agencies of exchange" that assist in the process.
10. Why must care be exercised to avoid confusion if one uses the term "distribution" in speaking of the exchange of goods?
11. Recalling the definition of "production," state whether "agencies of exchange" may properly be thought of as producers. Explain.
12. Comment on the relative cost of *production* and *distribution*, as indicated by examples cited by the Twentieth Century Fund.
13. Why is "manufacturer-to-customer" exchange difficult to put into successful practice?
14. Without the assistance of agencies of exchange, "specialization as we now have it would be impossible." Defend or refute this statement.
15. State briefly the usual argument advanced in support of the "Keep Money at Home" theory.
16. "It is obvious that we gain most when we spend our money where we get for it the greatest return in the way of commodities and services." Does this mean buying at home or away from home?
17. Show the connection between a protective tariff and the "Keep Money at Home" theory.
18. According to the "Lump of Labor" theory, there is only a certain amount of work to be done in a community. Is this true? Why or why not?
19. How may a belief in the "Make Work" theory lead to restriction of output on the part of workers?
20. How may the expansibility of human wants be used in proving the fallacy of the "Make-Work" theory?
21. Distinguish between "general overproduction" and "misdirected production."
22. Why is it impossible for "general overproduction" to exist in the long run?
23. How could the scale of living of all members of society be raised?
24. "There is no assurance of personal benefit [through an individual producing as much goods as possible] unless there is a *general movement* in the direction of maximum production." Explain.
25. "From the purely selfish point of view, restriction of output may often be a wise practice to follow." Why?

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The Principles of Money

WE HAVE MADE SEVERAL REFERENCES IN PRECEDING CHAPTERS TO THE usefulness of money in facilitating the process of exchange. We shall now go into the subject at greater length, describing the nature of money and explaining the functions it performs in a highly developed economic society.

MONEY IN THE UNITED STATES

Since most of our illustrations will be drawn from monetary practice in this country, it will be helpful to have before us a list of the several kinds of money that play a part in our monetary system. They are as below:

TABLE 34. KINDS AND QUANTITIES OF MONEY IN THE UNITED STATES^a
(OCTOBER 31, 1947)

Gold.....	\$22,294,269,675
Gold certificates.....	(21,091,368,828)
Standard silver dollars.....	493,462,269
Silver bullion.....	1,933,480,561
Silver certificates.....	(2,238,970,492)
Subsidiary silver.....	930,916,455
Minor coin.....	353,090,960
United States notes (greenbacks)	346,681,016
Federal Reserve notes.....	25,208,302,775
Federal Reserve bank notes.....	390,877,695
National bank notes.....	105,213,460
Total.....	\$52,056,294,866

^aFrom *Circulation Statement of United States Money—October 31, 1947*, issued by the United States Treasury Department. The figures in parentheses are not included in the total, since they are included in other items in the table. Omitted from the table are treasury notes of 1890, which are included in the government statement but “are being canceled and retired on receipt.” This item is of slight importance, amounting to little more than one million dollars.

Many people who have been using American money for years are surprised to learn that we have so many kinds of acceptable currency. A few words of explanation about each of these items will help to clear up the situation. Separating the items into two groups (metallic money and paper money), we shall examine them briefly. Our new grouping gives us the following outline:

I. METALLIC MONEY:

- A. Gold bullion
- B. Standard silver dollar
- C. Silver bullion
- D. Subsidiary coin:
 - 1. Silver:
 - a. Half-dollar
 - b. Quarter-dollar
 - c. Dime
 - 2. Other metals (minor coin):
 - a. Five-cent piece (of copper and nickel)
 - b. Cent (of copper, tin, and zinc)

II. PAPER MONEY:

- A. United States government obligations:
 - 1. Gold certificates
 - 2. Silver certificates
 - 3. United States notes (greenbacks)
- B. Bank obligations (guaranteed by United States government):
 - 1. Federal Reserve notes
 - 2. Federal Reserve bank notes
 - 3. National bank notes

Gold Bullion. Gold is the basis of the monetary system of the United States, and every piece of money, whether metallic or paper, is measured nominally in terms of the "gold dollar." Prior to 1934, the dollar was defined as 25.8 grains of gold nine-tenths fine. But the Gold Reserve Act of 1934 authorized the President to reduce the gold weight of the dollar by not less than 40 per cent or more than 50 per cent; and on January 31, 1934, President Roosevelt by proclamation changed its weight to 15 5/21 grains of gold nine-tenths fine. The term "nine-tenths fine" refers to the purity of the gold bullion, and means that it consists of 900 parts pure gold to 100 parts of copper alloy.

The gold coin which circulated in the United States before the passage of emergency banking legislation in 1933 actually contained 25.8 grains of gold of this degree of fineness, for every dollar of face value. But gold coin and gold bullion, as well as gold certificates, were "called in" by the President of the United States, by authority of the Emergency Banking Act of March 6, 1933. Monetary gold did not circulate extensively in the United States even before that date, but was used chiefly for bank reserves and for the payment of balances arising out of international trade. It has now been wholly removed from domestic circulation, the gold coin reduced to bullion, and the total stock is now held in the United States Treasury as security against outstanding issues of United States government paper money. However, it can still be obtained, in quantities and at times approved by the Secretary of the Treasury, for use in international

trade. Despite the fact that gold no longer circulates as money in this country and that other forms of money are no longer redeemable in gold, *the dollar continues to be defined as a specified amount of gold*, and this amount is at present 15 5/21 grains nine-tenths fine.

Standard money is money which contains the amount of metal necessary to make its value as bullion exactly equal to its value as money. Since gold coin and gold bullion have been the only forms of money in our monetary system having a bullion value exactly equal to their money value, they have constituted the only strictly standard money we have had. The restrictions that were placed upon the use of gold in 1933 brought about a situation in which there is no standard money in general circulation in this country, though there is a large stock of gold bullion in the United States Treasury.

Standard Silver Dollars. Our so-called standard silver dollars are a relic of the bimetallic period of the country's monetary history, when the silver dollar, as well as the gold, was equally valuable as money and bullion, and was therefore genuinely "standard." The silver dollar contains 412.5 grains of silver nine-tenths fine, and is now worth as bullion only about 54 cents. This being the case, it might properly be placed under the classification of "subsidiary coins," which will be dealt with in a later section; but we have followed the time-honored custom of giving the silver dollar a separate heading.

Silver dollars pass freely from person to person in certain parts of the country, particularly in the Far West, where they seem to enjoy higher favor than paper dollars; but, because of their weight and bulk, they are extremely unpopular in some sections of the United States. Of the 494 million silver dollars in existence on October 31, 1947, only 151 million were actually in circulation. The others were held in the Treasury, and silver certificates circulated in their stead.

Silver Bullion. This item is of recent origin, having arisen almost wholly out of the operation of the Silver Purchase Plan, which will be described later in the chapter. We shall see that the government can make about \$1.43 worth of silver coin from every dollar's worth of newly mined American silver bullion that it buys. Hence, the purchase of silver leads to a large "profit" to the government, and has led to the accumulation of silver bullion. This stock of silver (which may be expected to increase materially with the passage of time) may later be put into circulation through coinage or through the medium of silver certificates.

Subsidiary Coins. Subsidiary coins are issued by the government because of the need for coins smaller than a dollar in a host of everyday transactions. Silver is used for the coins of larger values, such as the half-dollar, quarter-dollar, and dime. Its use in coins of lesser value than the dime would result in pieces of money so small as to be extremely inconvenient. Consequently, the five-cent piece and cent (which are often called "minor coins" or "tokens") are made chiefly of copper.

Like the silver dollar, subsidiary coins are much less valuable as bullion than as money, and consequently are not standard money.

Gold and Silver Certificates. Gold certificates bear a close relationship to gold coin and bullion, and silver certificates to standard silver dollars, since they are issues of paper money certifying the actual deposit of the gold or silver, as the case may be, with the Treasurer of the United States. The *gold certificates* are rather closely held by the Treasury and Federal Reserve banks, and of the total of some 21 billion dollars' worth in existence only about 47 millions are "at large." Even these are not actually in circulation, but probably have been destroyed, mislaid, or are in the possession of those who do not know, or have disregarded, their legal obligation to turn these certificates over to the United States Treasury in exchange for other money. Prior to 1933, gold certificates were redeemable in gold upon demand, but they can now be redeemed only by Federal Reserve banks at the discretion of the Secretary of the Treasury. Furthermore, they are redeemable only "for uses authorized by law."

Silver certificates are allowed to circulate much more freely. About 9 per cent of all silver certificates are held by Federal Reserve banks, the other 91 per cent or about 2 billion dollars' worth) being used in everyday business transactions. Moreover, they are readily redeemable at the Treasury in silver dollars.

United States Notes (Greenbacks). United States notes, which are better known as "greenbacks," are a government obligation which dates back to Civil War times. Issued in 1862, they had for a time a value of only 35 cents on the dollar. From 1879 to 1933 they were convertible into gold, and the Treasury maintained a fund of about 156 million dollars in gold for the redemption of these notes. Relatively few, however, were presented for redemption, and they circulated quite as freely as any other American money. The gold redemption fund referred to above is still intact, but is not being used for paying off these notes. However, United States notes are redeemable in lawful money at the Treasury. They are an interesting example of inconvertible paper money made convertible into gold, and later declared inconvertible.

Bank Notes. The several kinds of paper money that have been described up to this point are issued by the Treasury and are obligations of the United States government. Bank notes are also obligations of the government in the sense that their redemption in lawful money is guaranteed, but they are issued by national banks and Federal Reserve banks, and not by the government itself.

National bank notes are promises to pay to the bearer in "lawful money" the full face value of whatever notes a given bank puts into circulation. They have been issued by national banks which have deposited with the Treasurer of the United States registered government bonds of specified issues up to 100 per cent of the note issue, and in addition a redemption fund of lawful money amounting to 5 per cent of the par value of the

notes issued. National bank notes are redeemable in lawful money at the Treasury or at the bank that issued them. Since August 1, 1935, they have been disappearing from circulation. As of that date, the Secretary of the Treasury called in the government bonds on the basis of which national bank notes were issued, and thus made it unprofitable for the banks to keep the notes in circulation. Several hundred million dollars' worth have since been redeemed, and yet on October 31, 1947—twelve years after the retirement of the bonds by the Treasury became effective—national bank notes to the amount of 105 million dollars were still outstanding. Presumably, this form of paper money will become progressively scarcer, and eventually disappear entirely.

Federal Reserve bank notes differ slightly from national bank notes in their nature and conditions of issue. One difference lies in the fact that the note issues of Federal Reserve banks are not limited, as are those of national banks, to the amount of the issuing bank's capital. A second difference is that Federal Reserve bank notes may be issued not only on the basis of government bonds, but also with any direct obligations of the United States, or with approved commercial paper up to 90 per cent of its face value, as security. It was the intent of the Federal Reserve Act of 1913 that Federal Reserve bank notes should gradually replace national bank notes, the latter being retired from circulation. But this change has not taken place to any appreciable degree. The national bank notes are being replaced, rather, by Federal Reserve notes, which are issued on a different basis from Federal Reserve bank notes. At present, the total face value of Federal Reserve bank notes is about three and a half times the total face value of national bank notes. Federal Reserve bank notes are redeemable in lawful money at the Treasury and at the Federal Reserve bank of issue.

Federal Reserve notes, despite their similarity in name to Federal Reserve bank notes, are issued on very different terms. They will be described in detail in a later chapter, but it may be mentioned here that prior to 1933 they were secured, up to 100 per cent of their issue, either by gold or by a combination of gold and commercial paper. In the latter case, it was required that at least 40 per cent of the total should be gold. Since the passage of the Emergency Banking Act in 1933, direct obligations of the United States may be substituted for eligible commercial paper if such substitution is approved by the Board of Governors of the Federal Reserve System, and gold certificates are now used as security in place of gold. Furthermore, the required percentage of gold certificates was reduced, as of June 12, 1945, from 40 to 25. Commercial paper, it should be added, consists of notes, drafts, and other paper obligations arising out of commercial transactions. These items also will be dealt with later. Federal Reserve notes are redeemable in lawful money at the Treasury or at any Federal Reserve bank. They comprise approximately 85 per cent of all

United States money actually in circulation—that is, outside the Treasury and the Federal Reserve banks.

Convertibility of Paper Money. We shall now examine several points of difference as between representative, convertible, and inconvertible money, with illustrations drawn chiefly from monetary experience in the United States.

Representative money is a receipt for, and promise to return upon demand, a specified amount of metallic money which has been intrusted to a responsible public authority, by whom it is to be held until called for. Thus, United States silver certificates are receipts for, and claims upon, silver that has been deposited with the Treasurer of the United States.

Silver certificates have frequently been classified as convertible money, and rightly so up to 1933, since, though they were *directly* redeemable only in silver, they were *indirectly* convertible into gold. Now that gold redemption of paper money has been suspended, it is no longer correct to say that silver certificates are convertible. Another characteristic of silver certificates is that they are backed, dollar for dollar, by the actual silver in which they are redeemable. Moreover, they are used purely as substitutes for metallic money, and not (like bank notes) as devices for increasing the amount of currency in circulation. As we have already observed, they have the advantage of being more convenient in handling than the metal, and their use prevents wear and tear on the coins themselves.

Prior to the recall of gold from circulation in 1933, gold certificates as well as silver certificates were representative money, since gold certificates were actually backed by and were redeemable in gold at the Treasury. They still have a dollar-for-dollar backing in gold, but the gold for which they call is no longer obtainable upon demand. Consequently, gold certificates do not now rate as representative money, but come under the heading of inconvertible paper money.

Convertible Paper Money. The convertibility of paper money rests upon the maintenance of an adequate reserve which may be drawn upon if redemption is demanded, and upon legal provision that the money shall be redeemed upon demand to the proper authorities. All of the paper money in use in recent years in the United States was, up to 1933, convertible into gold, either directly or indirectly. But so ample were the reserves from which redemption could be made that there was seldom an extensive demand for standard money in exchange for paper; for, strangely enough, the redemption of paper money is seldom desired unless there is fear that redemption, if requested, will be refused.

It was this fear which, in the great depression following 1929, gave rise to such unprecedented demands for gold in place of paper money that the privilege of redemption in gold was withdrawn in 1933. The metallic backing of our paper money, while more than adequate to meet the

demands of normal times, has never of course been sufficient to permit the redemption, in gold or silver, of all paper money outstanding. The payment of gold and silver certificates was fully assured by the maintenance of a 100 per cent deposit. Gold to the amount of 43 per cent was held as a reserve against the outstanding United States notes, or greenbacks. National bank notes and Federal Reserve bank notes had a monetary backing of only 5 per cent, which might or might not be gold. And the metallic security of Federal Reserve notes was usually only a 40 per cent deposit of gold. *In the final analysis, convertibility means redemption in gold if gold is demanded.* But we have not had a sufficient stock of gold to permit the redemption of all kinds of money which the government promised to redeem in gold. It is apparent, therefore, that in the face of a growing demand for redemption the only way to prevent a collapse of the monetary system was to withdraw, at least temporarily, the privilege of converting paper money into gold, the standard money of the United States.

Inconvertible Paper Money. Inconvertible paper money is currency which has no value in itself and is not redeemable in standard coin, but circulates only by authority of government. Inconvertible money (or "fiat money," as it is often called) is usually made legal tender; this fact and the confidence that people have in the promises of their government are sufficient explanation of the acceptability of a money that cannot be redeemed in coin or bullion.

Fiat money is most often issued in time of great emergency, such as war, when the printing of money appears to be the easiest way (and sometimes, indeed, the only way) to secure funds with which to meet necessary expenses. The Civil War was responsible for the issuance of greenbacks, and World War I brought upon European countries a veritable deluge of fiat money. Inconvertible money sometimes becomes convertible, as was the case with the greenbacks after an interval of seventeen years. But Russia, Germany, and Austria printed paper money in such tremendous quantities in order to meet war and post-war needs, that redemption was out of the question and the notes were repudiated. France, facing a problem that was similar but not so serious, chose to "stabilize" the franc at a fraction of its former gold value. But this, in effect, was repudiation of a large part of the obligation represented by the paper money outstanding.

A serious difficulty with fiat money is the grave likelihood of overissue, once the practice of printing this kind of money is resorted to. And when sufficient fiat money has been issued to serve as exchange media for all business transactions, fiat money alone will be used. Since it is customary to endow such money with the power of legal tender, it will theoretically circulate on a par with gold. But gold may be "called in" by the government. And even if it is allowed to remain in circulation, gold will not, in actual practice, be employed at all if an abundance of inconvertible paper

money is available. On the contrary, as we shall see shortly in our examination of Gresham's Law, it will disappear from circulation, part of it being used in foreign trade, where its purchasing power is greater than at home; part being made into articles of utility or ornament; and part being stored away against the time when it can again be used to advantage in domestic trade.

Since 1933, the paper money of the United States has been inconvertible paper money, for in that year it ceased to be redeemable in gold, our standard money. The fact that silver certificates may be redeemed in silver dollars does not alter the situation, for the terms "convertibility" and "inconvertibility" relate only to standard money, and silver dollars do not qualify as standard money since their value as money is much greater than their value as bullion.

"Total Money" and "Money in Circulation." Some kinds of money circulate freely, while other kinds do not. The total amount of money of the United States on October 31, 1947, was distributed as follows:

Money held in the Treasury.....	\$19,559,285,866*
Money held by Federal Reserve banks and agents.....	3,945,138,944
Money in circulation.....	28,551,870,056
	<hr/>
Total money in the United States.....	\$52,056,294,866

* To avoid duplication, we have reduced this figure for gold and silver bullion actually held in the Treasury, deducting an amount equal to the total of gold and silver certificates *outside* the Treasury. Obviously, we should be guilty of double-counting if we included both the bullion and the certificates.

These figures make it clear that only about 55 per cent of the money of the United States is being used *directly* in carrying on business transactions. But this does not mean that the rest of the money is idle. Gold and gold certificates, when held in a Federal Reserve bank, permit the issuance of far more purchasing power (in the form of Federal Reserve notes or bank credit) than if they were used directly for buying goods. By using much of our money as *reserves*, instead of keeping all of it in actual circulation, we are enabled to increase enormously the funds available for conducting economic operations, as we shall see in the next chapter.

THE NATURE OF MONEY

With this picture of the kinds of United States money as a background, we proceed to a consideration of the character of money and its use in present-day economic life.

Attributes of a Satisfactory Money. Money may be defined as *anything*

that serves as a standard of values, or is generally acceptable and is used primarily as a medium of exchange. The traditional definition of money—"anything that serves both as a standard of values *and* a medium of exchange"—has not applied to United States money since April 5, 1933. For gold has not been allowed to circulate in this country since that date, and is therefore no longer a medium of exchange, though it still serves as a nominal standard of values. Hence, we have modified the traditional definition of money to meet the needs of the American situation. Gold still qualifies as money because it serves as a standard of values; and other kinds of money fall within the limits of the definition because they are generally acceptable and are used primarily as a medium of exchange. *Acceptability* is the prime essential of a good money, and this quality depends, in turn, upon a number of other attributes, namely, portability, durability, uniformity, divisibility, cognizability, and stability of value.

Many commodities have been used as money in the past, but have been discarded for this purpose because they failed to possess one or more of these attributes. Tobacco, which was quite generally used as money in colonial Virginia, was too bulky and heavy to be readily portable; and it also lacked stability of value, for its purchasing power depended upon the size of the total crop, and this varied greatly from year to year. Cattle and sheep, though used by pastoral tribes, are not easily divisible, nor are they at all uniform. They could not, therefore, be used in small transactions, and values could not be expressed accurately in terms of these animals because of differences in size, weight, and quality. Corn and wheat have served as money at times, but are unsuitable for several reasons, one being the absence of durability, since grains are subject to deterioration. Precious stones also have been used, but they are deficient in cognizability; that is to say, it requires an expert to tell whether they are genuine or spurious.

The influence of these attributes upon the acceptability of money should be fairly obvious. If a commodity is easily carried about (portability), if it gives promise of lasting for a long time (durability), if a unit is like every other similar unit in value (uniformity), if the standard unit is separable into smaller units for use in minor transactions (divisibility), if every unit is marked so that its genuineness and value are apparent to the average person (cognizability), and if its purchasing power does not fluctuate greatly from time to time (stability of value), then—but not until then—does it become "generally acceptable" and meet the needs of a satisfactory medium of exchange.

Gold, Silver, and Paper Money. Because the articles that we have mentioned above, and many others that have been used in the past, are deficient in the qualities required of a satisfactory money, their place has been taken in most important countries by gold and silver, and by paper based upon these two precious metals. Gold and silver possess, to a high

degree, the characteristics which are desirable in money. Of the two, gold has an advantage over silver because of its higher value in relation to bulk and weight.

Gold, combining high value with slight bulk, satisfies the requirements of portability. It does not deteriorate with the passage of time, nor does it wear away rapidly through handling if it is hardened by the addition of an alloy. It presents no difficulties so far as uniformity is concerned. Though gold is readily divisible, its great value per unit of weight makes it unsuitable for small coins, so that silver, copper, and other metals are commonly used for making units of small denominations. When coined by a responsible government, gold is generally recognizable. It varies considerably in value from time to time, but is more stable than most commodities. Silver possesses these same qualities, though most of them to a lesser degree than gold; and one or the other of these two metals forms the nominal basis of every important monetary system of modern times.

The Question of Acceptability. Our definition includes paper money as well as metallic money, if only it is generally acceptable. Paper currency is very extensively used, and passes from hand to hand as freely as gold and silver, whenever there is confidence on the part of the receiver that he will experience no difficulty in passing it on to someone else, at full face value, in exchange for economic goods. But checks, drafts, and certain other negotiable papers do not fall within the definition, largely because they lack cognizability. Even a check signed by a multimillionnaire would not be generally acceptable, because the average person could not be certain that the signature was genuine and not a forgery. In like manner, a personal note (or "promise to pay") is not money, since many persons would decline to accept it on the ground that it might not be paid when due.

Legal Tender and Lawful Money. Legal tender is money which by legal declaration must be accepted by a creditor in payment of debt, in the absence of an agreement to the contrary. The power of legal tender is conferred upon certain specified forms of money for the purpose of facilitating the settlement of obligations. A refusal to accept legal tender in settlement of an obligation does not mean that the debt is canceled, but simply that the debtor need not pay interest accruing after the date on which payment in legal tender was proffered. The power of legal tender adds to the acceptability of money, since the person receiving it knows that it can be passed on to others in payment of obligations outstanding.

Prior to 1933, the question of legal tender in the United States was a complicated one, for some forms of American money enjoyed full legal tender whereas others were legal tender only for certain purposes or in limited quantities. In actual practice, however, there has been no real difficulty, since every form of our currency has been readily convertible

into any other form that might be desired. But even the academic perplexities of the situation have now been cleared away, for by joint resolution of Congress on May 26, 1933, "all coins and currencies of the United States (including Federal Reserve notes and circulating notes of Federal Reserve banks and national banking associations) heretofore or hereafter coined or issued" were declared full legal tender for all debts, public and private.

The term "lawful money" is one which we have used in the present chapter, which is in common use in monetary discussion. It is a term which requires no explanation other than the statement that lawful money is synonymous with legal tender, in so far as United States money is concerned. The two terms may therefore be used interchangeably.

Coinage. The coinage of metallic money and the printing or engraving of paper currency are almost invariably carried on either as a government monopoly or under strict governmental control. This, again, is an arrangement that contributes definitely to the acceptability of money, since it guarantees the use of metals of uniform fineness, units of standard weight, and therefore coins which will be received without hesitancy by the general populace. Coins of a given value are of uniform appearance and are easily recognized. They are struck from excellent dies in such manner as to render counterfeiting difficult. Not only are they stamped on both sides, but the edges of the more valuable coins are usually sharply "milled," as a precautionary measure against impairment of metal content by shaving or clipping. In the manufacture of paper money, fraud is discouraged by the use of special paper on which are printed or engraved intricate designs that cannot easily be reproduced by private individuals.

Policies on coinage differ with different countries. Occasionally a government aims to make a profit on the manufacture of money by charging more than enough to cover the costs of coinage; this is known as *seigniorage*. More often a charge known as *brassage* is made, this being an amount just sufficient to cover the costs involved. Or the system may be, as it was in the United States until 1933, one of *gratuitous coinage* of the standard metal. For in this country the holder of gold bullion could take it to the government mint, and there have it made into coin without charge except for the alloy which was mixed with the pure gold to give it the proper degree of hardness. Moreover, he was able to have it coined in *unlimited quantities*. This latter feature is known as the "free coinage" of gold.

But gold coin is no longer a part of our monetary system, and so we have no coinage of our standard metal. Gold may now be monetized only through its purchase by the Treasury, the seller receiving not gold coin, as was his privilege in the past, but some form of paper money in exchange for the bullion. Silver has not for many decades been "freely" coined in this country; that is, it has not been coined (as was gold prior to

1933) upon the simple request of the holder of bullion. When there has been need for more silver coins, they have been stamped from silver bullion purchased by the government for that purpose.

THE FUNCTIONS OF MONEY

Medium of Exchange. The primary function of money, as was indicated in our definition, is to act as a medium of exchange. When an economic society gets beyond the stage of barter, in which producers trade their surplus goods directly for goods of various kinds produced in surplus by others, the need for a satisfactory medium of exchange is apparent. Money, because it possesses the several attributes we have enumerated, is such a medium. Being easily exchangeable for commodities which one wishes to secure, it is readily accepted in return for goods that one may hold in excess and may therefore wish to sell. Exchange is greatly facilitated through the agency of money, for its use permits the employment of middlemen, who, though not desiring to consume certain goods themselves, are yet willing to purchase them (giving money in return) and later sell them (receiving money in return). In this manner, a producer is enabled, indirectly but conveniently, to deliver his product to the consumer. Through the instrumentality of money, moreover, services may be exchanged just as readily as material goods.

We have already noted the fact that gold has ceased to function in the United States as a medium of exchange. The monetary gold stock of this country is held in the United States Treasury, and paper money is circulated in its stead. An arrangement of this kind is satisfactory as long as public confidence in the paper money can be sustained, and this is largely a matter of keeping the amount of money issued down to a quantity that will not raise general prices unduly. But the acceptability of paper money does not ordinarily extend beyond the boundaries of the country of issue. Consequently, the settlement of balances arising through international trade (a subject which will be treated in a later chapter) is made in gold on the basis of weight.

Standard of Values. Money serves also as a standard of values, which is merely another way of saying that it provides us with a common denominator in terms of which all other commodities may be expressed and their importance in exchange easily compared. The convenience of reducing all commodities and services to this common unit is very great. If a garden hoe exchanges for two pounds of butter, it is possible, of course, to express the value of hoes in terms of butter and the value of butter in terms of hoes. But it is more convenient to express both in terms of dollars, saying, for example, that a hoe is worth a dollar and a pound of butter is worth fifty cents. Once the standard is well established and universally understood, values are automatically reduced to its

terms. Thus the statement that hoes are selling at one dollar each, and butter at fifty cents (or a half-dollar) a pound, is instantly and completely comprehensible to any person accustomed to our monetary system. The use of a standard unit (such as the dollar) makes it easy to compare the values of goods to be bought and sold.

Just because money functions as a standard of values, it does not follow that it possesses stability of value. Indeed, we have already noted its deficiency in this respect; but this is a shortcoming in which all commodities share, and some to a far greater degree than gold. Money is not, then, an unvarying standard of measurement such as the pound, foot, and bushel (which remain constant from year to year), but simply, as we have said, a common denominator in terms of which one may conveniently compare the values of different articles at a given time.

However, the establishment of a monetary standard, such as the dollar, does fix definitely the relative values of the several kinds of money included in the system. A fifty-cent piece, for instance, is always a half-dollar, even though its value as bullion is less than that of $7 \frac{13}{21}$ grains of gold nine-tenths fine. And two halfdollars will continue to have as great purchasing power as a paper dollar of any issue, a silver dollar, or one hundred cents' worth of subsidiary coin of any kind, as long as each of the several forms of money in circulation is readily exchangeable for any other form, and all forms have the power of full legal tender.

Standard of Deferred Payments. Present-day exchange consists largely of giving commodities or services, not in return for other commodities or services, or even for money, but in return for promises to pay at some future date. It is estimated that more than 90 per cent of the business of the United States is conducted on the basis of credit. But when a credit transaction takes place, some definite provision is usually made for settlement in the future and money is called upon to act as the standard of these deferred payments.

This means that an agreement is made to meet the obligation, at a specified future date, by paying in money the amount due. It is here that stability in value of money is especially desirable, since it is important that the amount of purchasing power delivered to the creditor when the obligation falls due should be the amount which, when the transaction took place, the debtor promised to deliver. Our study of price levels in a later chapter will show that, because money itself fluctuates in value, the purchasing power delivered on a deferred payment may be either greater or less than was implied in the contract, depending upon whether money has increased or decreased in value in the meantime. The fact remains, however, that money is the standard generally used; and it will continue to perform this function until the business world has been convinced of the advantages of one or other of several new standards that have been proposed for the purpose.

Basis of Credit. It is difficult to grasp the significance of money as a basis of credit without understanding the fundamentals of our system of banking, which will be described in Chapters 33 and 34. It may be said, however, that the adoption of a standard money, and its use as a reserve, permit the safe circulation of a volume of paper substitutes vastly greater than the original amount of standard money. We shall see that for every dollar's worth of gold certificates deposited as security with a Federal Reserve bank, there is the theoretical possibility of a reserve city member bank expanding credit to the extent of \$40.00. This element of elasticity is one which was not fully appreciated in this country prior to the adoption of our Federal Reserve System in 1914. It means, however, that as business expands, the volume of credit increases to meet its requirements, decreasing again when so much credit is no longer needed.

MONETARY SYSTEMS

Standard Money. Standard money, in the strict sense of the term, is money that contains the amount of metal necessary to make its value as bullion exactly equal to its value as money. If a country used nothing but standard money, there would never be any question about its acceptability so long as the standard metal was desired on its own account. For the coin could be converted into bullion by the simple process of melting, and the bullion, in turn, could be turned readily into money if a system of free coinage were in effect.

Measured by the above definition, gold bullion constitutes the only strictly standard money in this country. Silver dollars, though they were once standard and are still called by that name, are greatly underweight, and so also are all subsidiary coins. Paper money, despite its value in exchange, possesses almost no value as a commodity. The gold certificate, even though it is virtually a receipt for gold that is actually held in the Treasury, is at present inconvertible, and thus is as remote from being standard money as are the other kinds of paper money. Forms of United States money, other than gold bullion, may be called "credit money" since they represent promises to pay. This statement applies to short-weight metallic money (which includes all metallic money now in circulation) as well as to paper money.

Monometallism. For many years prior to 1933, the monetary standard of the United States was monometallic. Gold was the basis of our monetary system, and we were said to have a *gold standard*. The standard unit was the gold dollar, which was 25.8 grains of gold nine-tenths fine; there was free coinage of this metal; there was no prohibition on melting or exporting gold coin; the gold dollar was full legal tender; and all other kinds of United States money were convertible, directly or indirectly, into gold coin.

We shall later describe the system that obtains in this country at the present time. The characteristics listed above are those which marked the monetary system of the United States while it was on a monometallic gold standard. Until quite recently monometallism has been a world-wide phenomenon, and in most countries of economic importance the standard metal has been gold.

Bimetallism. But most governments, before adopting monometallism, have had some experience with a bimetallic standard. Under bimetallism, two metals—usually gold and silver—are coined upon presentation at the mint and in unlimited quantities, and both are full legal tender. As in the case of monometallism, there is no prohibition of melting or exportation. In setting up a system of bimetallism, it is necessary to decide upon a *mint ratio* to express the relative values of the two metals when used as money. The ratio adopted is naturally one that conforms very closely to the *market ratio*, which expresses the terms on which the metals exchange as bullion. If one ounce of gold, as metal, commands sixteen ounces of silver bullion in exchange, the market ratio is 16 to 1, and the same figures would ordinarily be chosen at the outset for the mint ratio.

So far, so good. And if the market ratio remained constant indefinitely, or the mint ratio could be manipulated so as to duplicate changes in market value, all would be well. But the market values of gold and silver, as of all commodities, depend upon the general conditions of supply and demand. Since both are constantly being mined, but in varying quantities, and since the demand for the metals is likewise subject to variation, their market values are constantly changing. In the year 1500 the market price of gold was about eleven times that of silver, so that the market ratio between silver and gold was 11 to 1; in 1850 it was about 15½ to 1; in 1900, 34 to 1;¹ and in 1947, approximately 50 to 1. This 1947 ratio of 50 to 1 was arrived at, of course, by comparing the market prices per ounce of gold and silver, and these prices were, respectively, \$35 and 70 cents.² The market ratio, then, lacks stability. Nor is it feasible to change the mint ratio frequently so that it will conform to the market ratio; for this would mean, among other difficulties, the circulation of coins alike in face value and yet different in their metallic content.

Overvalued and Undervalued Money. Because of the variability of the market ratio and the fixity of the mint ratio, it is next to impossible to

¹ Cf. W. H. Steiner, *Money and Banking*, New York, Henry Holt & Company, Inc., 1933, p. 81.

² Under presidential decree of April 24, 1935, the price of silver eligible for Treasury purchase, consisting of *newly mined American silver*, was made 77.57 cents an ounce. On December 31, 1937, this price was reduced to 64.64; on July 6, 1939, it was set by law at 71.11 cents for domestic silver mined after July 1, 1939; and on July 2, 1946 the price was again raised, this time to 90.5 cents an ounce. At the artificially high price the government is now paying for newly mined silver, the bullion that goes into a dollar costs about 70 cents, but melted down and sold in the silver bullion market it would bring only about 54 cents.

maintain a bimetallic standard over a long period of time. If, under a *monometallic gold standard*, an exceptionally large amount of silver were mined in 1948, the 1947 market ratio of 50 to 1 might be expected to change to (say) 51 to 1. This would represent a fall in the value of silver, attributable to the substantial increase in the quantity available. But if a *bimetallic standard* were in force, this increase in quantity would not lower the price of silver, since the mint ratio, set by law, would presumably remain fixed at 50 to 1. Under these conditions, silver would be overvalued and gold undervalued at the mint—that is to say, silver would command a higher price at the mint than on the market, and would therefore be sold only at the mint. As a consequence, the *theoretical* market ratio of (say) 51 to 1—which, as we saw above, would prevail in the presence of a monometallic gold standard—would be non-operative as long as silver could be disposed of more advantageously at the mint than on the market. Silver would tend to flow into the mint and gold to flow out, and these movements of silver and gold would likely continue until all the gold had been drained from the mint and only silver remained to serve as money; whereupon the market ratio would become operative and the mint ratio non-operative. The gold coins that had left the mint might be melted down and sold as bullion, be exported to other countries where they had greater purchasing power than at home, or possibly be hoarded in the hope that their exchange value would later increase.

If, on the other hand, gold were mined in unusually large quantities, the situation would be reversed. Gold bullion would then be brought to the mint, silver would flow out and disappear from circulation, and gold money only would be used for purposes of domestic exchange.

Gresham's Law. This tendency for money that is overvalued *at the mint* to drive out of circulation money that is undervalued, is known as Gresham's Law. The law is effective only when there are free and unlimited coinage of both metals, free melting, and full legal tender of both gold and silver. Moreover, the quantity of the overvalued money must be sufficient to meet the needs of business transactions; otherwise the two may circulate side by side.

There are many illustrations of the operation of Gresham's Law. An example which illustrates that the law is applicable to paper money as well as to gold and silver, is to be found in the circulation of greenbacks during and following the Civil War. From 1862 to 1879 these notes were not redeemable in gold. Though they had been declared legal tender, greenbacks were generally regarded as distinctly inferior to silver and gold. Persons having in their possession both metallic money and greenbacks held fast to the metal and paid in paper. Since sufficient greenbacks had been issued to carry on business operations, gold and silver were withheld from circulation and paper money was used almost exclusively. Inferior money had driven superior money out of circulation.

Gold and Silver Purchase Plans. Returning to the monetary system of the United States, we may note once more the extensive purchase of gold and silver bullion, begun by the government during the post-1929 depression.

Acting on authority given him under the Gold Reserve Act of 1934, President Roosevelt promptly reduced the gold content of the dollar, established a price of \$35 an ounce for gold, and ordered the Secretary of the Treasury to purchase gold bullion both in this country and abroad. Presumably, the purpose was to raise general prices in the United States to approximately their level in 1926, since it was thought that most of the business contracts outstanding were made when prices were at about the 1926 level and that a return to that level would aid in bringing about business recovery.³ It may fairly be questioned that the gold purchase plan raised prices as much as its sponsors had expected, but there can be no doubt that it brought an influx of gold bullion to the Treasury. The value of monetary gold in the United States was five times as great in 1941 as in 1932. This ten-year increase resulted partly from the greater value of gold (as expressed in terms of a dollar which contained fewer grains of gold than formerly), but it was attributable chiefly to large purchases of gold, both domestic and foreign, by the government.

In like manner, the Silver Purchase Act of 1934 added to our stock of metallic money. This Act declared it to be the policy of the United States to increase the stock of monetary silver until its value is one-fourth that of the total monetary stock of this country, the other three-fourths consisting of gold. The Secretary of the Treasury was authorized to buy silver until this proportion of one to three has been attained. It was estimated that it would require the purchase of about one and one-third billion ounces of silver to bring about the proportion of gold and silver aimed at by the Silver Purchase Act. Since silver mines in the United States had been producing some 25 million ounces of silver a year, this proposed change in our monetary stock was expected to provide a market for all silver mined in this country for two decades. This silver may be coined into silver dollars, or may be put into circulation through the issuance of silver certificates. In either event, the Silver Purchase Plan, if carried through to its stated conclusion, will add materially to the monetary stock of the United States. It has already increased the total amount of United States money by more than a billion dollars. Of course, every purchase of gold (under the Gold Reserve Act) requires an additional purchase of silver (under the Silver Purchase Act), if the proposed proportions of three to one are to be reached.

The present bullion content of the silver dollar (which the President of the United States has authority to lower) is 412.5 grains of silver nine-

³ The part that an increase in gold may play in raising the price level is explained in chap. 36.

tenths fine, so that one ounce of silver makes \$1.29 worth of silver coin. Since the present Treasury purchase price for newly mined American silver is 90½ cents an ounce, it will be seen that every time the government buys an ounce of silver and turns it into coin, it makes a "profit" of approximately 38½ cents.

The Managed, Inconvertible Gold Currency System of the United States. The recent changes in monetary practice in this country make it necessary to find a new term by which to designate the present currency system of the United States. Clearly, the old title—"the gold standard"—is no longer applicable, since one of its essential features—the power to redeem all forms of credit money in gold upon demand—has disappeared. Probably we can do no better than to call our present arrangement a "managed, inconvertible gold currency system."⁴

It is a *gold* system, since our standard unit, the dollar, is still defined in terms of gold, and the security back of our money consists in large part of a stock of gold bullion. However, "gold is relegated to a distinctly nominal rôle. . . . The commodity gold, consequently, may be said to function as an inspirer of confidence in money on the part of the public."⁵ Furthermore, we have an *inconvertible* system, inasmuch as none of our money in actual circulation is redeemable in the standard money, gold. Finally, the system is *managed*: that is, the quantity of money is not allowed to adjust itself on the basis of the presentation or withdrawal of gold at the mint and the issuance of bank notes of various kinds, but is presumably being managed by a central authority (the President of the United States) in an attempt to adjust the price level in such a way as to bring about the full use of the country's productive resources.⁶

Money is anything that serves as a standard of values, or is generally acceptable and is used primarily as a medium of exchange.

Standard money is money that contains the amount of metal necessary to make its value as bullion exactly equal to its value as money.

A *United States dollar* is 15 5/21 grains of gold nine-tenths fine.

Free coinage is the coinage of bullion in unlimited quantities (though not necessarily without charge) upon presentation at the mint.

Legal tender is money which by legal declaration must be accepted by a creditor in payment of debt, in the absence of an agreement to the contrary.

Gresham's Law: Money that is overvalued *at the mint* tends to drive out of circulation money that is undervalued.

⁴ This is the term adopted by Professor Ralph A. Young in *The New Monetary System of the United States* (New York, National Industrial Conference Board, Inc., 1934).

⁵ *Ibid.*, p. 29.

⁶ Cf. *ibid.*, p. 29.

Commercial Banking in the United States

ONE OF THE FUNCTIONS OF MONEY, AS WE SAW IN THE LAST CHAPTER, IS TO serve as a medium of exchange. Not only standard money but credit money (underweight coins and paper money) is useful in the performance of this function. But money, whether standard or credit, plays only a small part in the actual business transfers of the country, when compared with such credit instruments as checks and drafts. Gold, when used as a reserve against other kinds of circulating media, is a more vital factor in the business world than it could possibly be as an active medium of exchange. For its use in this way permits the circulation of a vast quantity of credit which is constantly employed in furthering business activities. It is a fair estimate to say that fully 90 per cent of our business operations are carried on through the use of substitutes for money. The check is, in present-day business, the most important of money substitutes.

Two Important Types of Credit. The need for credit arises largely from the fact that production is carried on in anticipation of demand. This means that many of the costs of production must be borne for some time before any return is realized by the sale of the product. If a silk loom is about to be discarded, then the part contributed by this loom to the last yard of cloth that is woven is a cost of production which was met perhaps some twenty years before the sale of the silk cloth. The ability to conduct an enterprise and the possession of a large amount of money do not always go together. Frequently, then, enterprisers are obliged to put their ideas to work, not with their own resources but with the aid of borrowed funds.

Let us consider, by way of illustration, the case of an energetic young man of business ability, with confidence in the future of television, but with no money of his own. Obviously, he must secure credit if he is to go into the business of manufacturing television receiving sets. The purchase or lease of land, the construction of a factory building, and the purchase of machines and tools require funds in considerable amounts. Moreover, these funds will be tied up for a long period of years, being invested in plant and equipment designed for a particular purpose. What

our would-be enterpriser needs is *investment credit*; that is, *long-term* loans, amounting to *large sums*, to be put into *fixed* capital. Such loans are usually secured through the issuance of bonds and shares of stock.

Even after the business is well established and is operating on a profitable basis, there may be times when this enterpriser will need additional funds for short periods of time. There are certain running expenses that must be met promptly, raw materials to be purchased, wages to be paid. And even though the books show a handsome profit, funds may be tied up temporarily in the form of goods manufactured and on hand, or television sets sold to wholesalers but not yet paid for. However, the running expenses of the company must be met, and without delay, so that an appeal is made for *commercial credit*, which consists of *short-term* loans, for relatively *small amounts*, to supply *circulating* capital.

SOME IMPORTANT CREDIT INSTRUMENTS

Book Accounts. Our suggestion that some of the television sets that were sold had not yet been paid for indicates that this enterpriser is extending credit to his customers, probably through book accounts. There is little credit mechanism involved in the process. Let us suppose that, in order to dispose of a substantial number of receiving sets held in stock, the enterpriser agrees to deliver one hundred sets to a wholesaler, waiting sixty days for payment or allowing 2 per cent discount for cash in ten days. This transaction now stands as an "account receivable" on the books of the seller and an "account payable" on the books of the buyer, to be canceled as soon as payment has been made.

Promissory Notes. A transaction of this kind might be handled through the use of a promissory note. This is an agreement to pay, "for value received," a stated amount of money "on demand" or at a specified time. When properly endorsed, a note becomes "negotiable"—that is, it may be bought and sold. The payee of a note (the person who is to receive payment) is likely immediately to endorse it (by signing his name on the back) and have it discounted at his bank. The process of discounting consists of the bank deducting in advance the interest charge for the period of time indicated in the note, and placing the remainder to the credit of the payee. The payee is then in a position to write checks against his account with the bank, to the full amount of this credit. An endorsement on a promissory note or check makes the endorser responsible for its payment in case the drawer of the instrument fails to make good his obligation.

Drafts, Bills of Exchange, Trade Acceptances. The *draft* is a very common device used in extending credit. This instrument appears under several names, such as *bill of exchange*, *trade acceptance*, and so on. The method of using the draft, also, is not entirely standardized. Sometimes

the draft is accompanied by a bill of lading, warehouse receipt, or other claim upon property; sometimes, again, it travels alone. At times, the transaction is handled through a *bank draft*, which is an order drawn by one bank on another. In all cases, however, the general principle is the same. A draft is an order written by one person to another, ordering that a specified amount of money be paid to a third person, sometimes (though not always) on a stated date. It follows that the familiar bank check is a form of draft.

A business transaction may give rise to the type of credit instrument shown in Fig. 39. This is a trade acceptance, a form of the draft, and

TRADE ACCEPTANCE Standard Form Approved By AMERICAN ACCEPTANCE COUNCIL New York	No. <u>453</u> <u>New York</u> <u>Oct 1, 1947</u> <small>(City of Drawer)</small> <small>(Date)</small>
	On <u>November 30, 1947</u> Pay to the order of ourselves <small>(Date of Maturity)</small>
	<u>Sixty Thousand</u> — Dollars (\$ <u>60,000</u> ^{xx} / ₁₀₀)
	The transaction which gives rise to this instrument is the purchase of goods by the acceptor from the drawer. The drawer may accept this bill payable at any bank, banker or trust company in the United States which such drawee may designate.
	To <u>New York-Jacksonville Transit Corporation</u> <u>Johnson Airplane Co</u> <small>(Name of Drawee)</small> <small>(Signature of Drawer)</small> <u>New York, N.Y.</u> By <u>William Johnson</u> <small>(City of Drawee)</small>

FIG. 39. A TRADE ACCEPTANCE (one form of the draft)

as here drawn it orders the New York-Jacksonville Transit Corporation to pay to the Johnson Airplane Company, in sixty days, the sum of \$60,000. This trade acceptance, or draft, is forwarded to the Transit Corporation, and the Corporation "accepts" it by writing across the face of the instrument the word "Accepted," the date, the name of the bank at which it will be paid, and finally the signature of a responsible official. Not only trade acceptances but drafts in general are "accepted" in this way.

Thus endorsed, the trade acceptance is negotiable, and may be readily discounted. The statement that "the transaction which gives rise to this instrument is the purchase of goods by the acceptor from the drawer" makes the paper acceptable at Federal Reserve banks. The Federal Reserve System is designed to aid only in the financing of legitimate short-term business operations; and the statement that we have quoted is inserted as evidence that the proceeds of this trade acceptance have not been used for a permanent investment, or for one of a purely speculative character.

A draft when accepted by the drawee (the person to whom it is ad-

dressed) becomes virtually a promissory note. If William Johnson, on behalf of the Johnson Airplane Company, discounts the trade acceptance shown in Fig. 39, he must himself endorse it and it thus becomes "double-name paper." This means that the amount advanced to the Johnson Airplane Company on the strength of this instrument will be charged back to the company if the New York-Jacksonville Transit Corporation does not make payment at the stated time.

THE NATURE OF COMMERCIAL BANKING

The Operation of a Commercial Bank. An examination of the statement of a commercial bank will provide background for our discussion of commercial banking in the United States. Table 35 is such a statement for a small-town bank.

TABLE 35. STATEMENT OF A SMALL NATIONAL BANK

<i>Assets</i>	<i>Liabilities</i>
Loans and discounts (1)....\$ 621,190.28	Capital (6).....\$ 125,000.00
United States bonds (2) ... 1,114,350.63	Surplus (7)..... 150,000.00
Other bonds and securities (3) 423,617.72	Undivided profits (8)..... 78,182.52
Real estate and fixtures (4)... 101,640.17	Deposits (9)..... 2,269,022.53
Cash reserve (5)..... 361,406.25	
<hr/>	<hr/>
\$2,622,205.05	\$2,622,205.05

We note, first, the bank's *liabilities*. The capital of the bank (Item 6) is the fund subscribed by its stockholders to enable it to start in business. The *surplus* (Item 7) consists of certain earnings that have been assigned permanently to the operation of the business. The *undivided profits* (Item 8) are gains which may later be transferred to surplus, or may on the other hand, be distributed to the stockholders in the form of dividends. Items 6, 7, and 8 constitute a fund which (says the statement) "becomes the property of the stockholders after the debts to the depositors are paid, and is a guarantee fund upon which we solicit new deposits and retain those which have been lodged with us for many years." These three items—capital, surplus, and undivided profits—are amounts *due the owners of the bank*. *Deposits* (Item 9) are amounts *due customers of the bank* who have left funds in the custody of the bank or to whom the bank has made advances against which these customers may write checks.

Since a commercial bank is a profit-seeking enterprise, its officers try to find investments for its funds which will pay a satisfactory return. The *assets* of the bank indicate the nature of these investments. *Loans and discounts* (Item 1) are sums lent to business men and others, usually on the basis of promissory notes or other "commercial paper," but sometimes on real estate or securities. *Government bonds* (Item 2) and *other bonds*

and securities (Item 3) are investments to which commercial banks turn when more profitable business is not obtainable. Item 4, *real estate and fixtures*, covers the building, grounds, and equipment used in operating a bank. The *cash reserve* (Item 5) consists partly of legal reserves held by the Federal Reserve bank of the district in which the commercial bank is located, and partly of cash in the vault of the bank itself. The assets, it will be observed, are items which are *owned by the bank or owed to the bank by others*.

Chief Functions of a Commercial Bank. The banking functions which are peculiarly those of the commercial bank are (1) making loans and discounts, and (2) creating deposits for business concerns. In the operation of our economic system, business enterprisers continually find themselves in possession of certain types of purchasing power, or claims upon economic goods. These may take the form of commodities finished but unsold, or commodities sold but not paid for. Eventually, through the process of exchange, these goods will be paid for; but in the meantime the smooth, efficient operation of business demands that further raw materials be purchased, wages be paid, and other regular expenses of business operation be met as they fall due.

In situations such as these, commercial banks may render a great service to business men. By means of short-term loans, these banks substitute purchasing power of wide acceptability (money, or deposits subject to check) for purchasing power of limited acceptability (goods, notes, or drafts) held by the business concerns. A concern presents a promissory note or other acceptable credit instrument at the bank, and is granted a "loan" (which means that the interest charge will be paid when the loan falls due) or a "discount" (in which case the bank deducts the interest charge from the amount of the loan at the time it is made). In either event, the transaction is entered in the books of the bank as both an asset and a liability. It appears among "loans and discounts" as an asset—an item owed to the bank by its customer—and among "deposits" as a liability—an amount owed by the bank to its customer. With this deposit to its credit, the borrowing concern may proceed to write checks against it, though many banks require a borrower to maintain an unused *balance* of 10 to 25 per cent of his loan.

The ability to borrow in this way from commercial banks enables business men to purchase at once the commodities and services they must have, and later they pay off their obligations to the banks. From the point of view of the business men, loans are granted and credit is extended from time to time. From the point of view of society as a whole, a tremendous volume of credit is kept continually in circulation, and through the use of this credit the exchange of goods is facilitated.

To some present-day writers on banking, this description of the function of commercial banking might appear to be out of date and old-

fashioned. It might be held that these short-term, self-liquidating loans based on actual business transactions have been playing a progressively smaller part in the business of commercial banks in recent years; while loans based on real estate, stocks and bonds, and similar investments have become increasingly important. It is true that commercial banks do engage, to a considerable extent, in other types of banking. Some have savings departments, and thus collect funds which are set to work in long-term investments. Many commercial banks are also trust companies and handle, among other things, trust funds which require relatively permanent investment. Moreover, until recent years, some commercial banks have engaged, either directly or through affiliated companies, in investment banking operations connected with the promotion and underwriting of security issues; and prior to August 1, 1935, the national banks of the United States issued money in the form of national bank notes. Nevertheless, the fact remains that the principal function of commercial banks, *as such*, has been and continues to be that of supplying short-term credit to business men. On this subject we shall have more to say when we discuss the vital question of the safety of the deposits held by commercial banks.

The Credit-Currency Structure. We noted in the preceding chapter that about 28½ billion dollars of United States money was actually in circulation on October 31, 1947. This is a substantial sum, but the amazing growth of "deposit currency" (sometimes called "check currency") as a means of paying bills has forced money into a distinctly secondary position. Deposit currency consists of demand deposits created by commercial banks and brought into circulation through the agency of bank checks. Demand deposits in this country totaled more than 84 billion dollars on September 24, 1947.

Demand Deposits (Deposit Currency). It is estimated by experts that this huge amount of deposit currency has a "turnover" of twenty-five to thirty times a year; that is, that this sum is spent some twenty-five or thirty times in the course of a year. For although these deposits are being continually depleted by checks that are written against them, they are also being added to continually from several sources.

One of these, which is of relatively slight importance, is the deposit of money, checks, money orders, and claims upon cash, by means of which individuals and business concerns increase their balances, and against which they draw their checks as occasion arises. Much more important are the deposits that arise through loans and discounts. When a bank lends to a business concern on the basis of commercial paper, such as a promissory note or trade acceptance, it pays the concern the amount due in one of two forms—either in bank notes or in a demand deposit. If notes are taken, the business firm uses them in paying bills and thus distributes bank credit in place of personal credit. If the bank simply

credits the account of the concern with the amount due, there is again an exchange of bank credit for personal credit, since demand deposits are promises of banks to pay money on demand. And the business concern, paying bills with checks drawn against a demand deposit, again distributes the bank's implied promises to pay, in place of its own. It is chiefly through loans and discounts, and not through the deposit of money in a bank, that demand deposits arise. It is important to emphasize this point, since it is one that is often overlooked by students of economics.

Another point that must be stressed is the fact that commercial banks deal mainly in short-term obligations; and this is one reason why the fund of deposit currency is being continually replenished. When a bank creates a demand deposit by granting a loan or discount, it *may* be required to pay out money every time one of this customer's checks comes in for payment, though in many cases the person presenting the check will merely ask the bank to place the amount to his credit so that *his* account may be increased. But in any case, the credit extended on commercial paper is ordinarily limited to a maximum period of ninety days, and at the end of that period the obligation must be paid by the borrower, unless the bank (if so requested) sees fit to renew the loan in whole or part. Since a bank handles thousands of transactions of this kind, its credit resources are in a state of constant flux, being in process of depletion through daily withdrawals, but being replenished all the while by daily deposits.

Bank Reserves. Bankers are sometimes tempted to allow the extension of credit to go beyond the point of safety, for with each new loan a profit is realized. It would be disastrous, however, for a bank to be unable to pay a legitimate claim that is presented against it, since failure of this kind would result in the bank closing its doors. Consequently, it has been the custom in this country to provide, by law, that reserves of a specified percentage must be held against demand and time deposits. In the case of state banks not members of the Federal Reserve System, the amount of the required reserve is regulated by state legislation and differs somewhat from state to state. The amount that for twenty years had to be held in reserve by banks belonging to the Federal Reserve System against demand deposits was 13 per cent for banks in New York and Chicago, 10 per cent for those in cities of medium size, and 7 per cent for small-town banks; the reserve required against time deposits—those which cannot be withdrawn without “notice” of a month being given—was 3 per cent in all cases. The reserves are deposited with the Federal Reserve bank of the district in which the member bank is located. (The Board of Governors of the Federal Reserve System, by authority of the Banking Act of 1935, has several times changed the reserve requirements against demand and time deposits. The latest change, which went into effect on October 3, 1942, made these reserves 20, 20, and 14 per cent for demand deposits, and

6 per cent for time deposits. Since other changes may be made from time to time, we shall use the older, well-established figures in many of our illustrations.)

These reserves may appear at first sight to be absurdly small; but experience has shown that they are entirely adequate, for as long as confidence is maintained there is very little chance of depositors making a concerted demand upon the member banks for payment of the amounts due them. Furthermore, as our study of the Federal Reserve System will show, provision has been made for rendering first aid to any member bank that is threatened by a "run"—that is, by a demand for cash on the part of a large number of depositors.

The Clearing House. Let us suppose that the Johnson Airplane Company has drawn a check for \$50,000 on the Corn Exchange Bank Trust Company in favor of the United States Steel Corporation. If the Steel Corporation happens to have an account in this particular bank, it will in all probability simply endorse the check and deposit it. The bank thereupon debits the Johnson Airplane Company with \$50,000, thus decreasing that company's deposit account, and credits the United States Steel Corporation with the same amount. In this way a payment is effected without any transfer whatsoever of actual money. All that has been done is to make a book transfer.

If the Steel Corporation should be doing its banking business with another institution, say the Chase National Bank, it would still make no direct appeal to the Corn Exchange Bank for payment of the check in cash. In this case, the check would be endorsed and deposited with the Chase National Bank, and this institution (and not the Steel Company) would proceed to make collection. Time was when the procedure followed was to send out daily a "runner," or messenger, from one bank to another, to make collection in cash for credits that had accumulated in the course of the previous day's business. The second bank would likewise send a representative to the first bank, to receive payment of any amount that might be due by reason of credit instruments held against this bank. It is obvious that this duplication of effort meant waste, and as banks increased in number the expenditure of time and effort increased at a still faster pace.

But this method of collection has long since given way to the clearing house. This is a central agency, the main purpose of which is to effect daily settlements between the banks of a given area. If the Chase National Bank has claims against the Corn Exchange Bank, it is likely also that the Corn Exchange Bank has claims against the Chase National. Similar relationships exist between practically all banks of importance in any given city. In order to compare claims and make settlements, representatives of the various banks meet at the clearing house at designated hours every day. Each representative, or "settling clerk," presents the claims of his bank

against other institutions, and receives in turn the claims of the other banks against his own. A balance is struck, either debit or credit, and the amount due is paid by the bank to the clearing house or by the clearing house to the bank, as the case may be.

Reference to Table 36¹ should help to make the procedure clear. Bank A, for example, presents at the clearing house claims upon Banks B, C, D, and E, in the form of checks drawn against deposits in these banks and cashed by Bank A for its customers. The total of these claims is \$12,550. But the other members of the clearing house present claims upon Bank A, as is seen in the first column, to the amount of \$13,050. If one set of claims is balanced against the other, it is evident that Bank A can square its account with the clearing house by paying the amount due, \$500. Banks D and E are obliged to pay, respectively, \$1305 and \$75; while

TABLE 36. HYPOTHETICAL EXAMPLE OF CLEARING HOUSE DEBITS AND CREDITS

Customers of	Deposited Checks Drawn in the Following Amounts on					
	Bank A	Bank B	Bank C	Bank D	Bank E	Total
Bank A.....		\$2,500	\$ 850	\$5,800	\$3,400	\$12,550
Bank B.....	\$ 3,600		1,800	575	1,350	7,325
Bank C.....	2,200	630		750	980	4,560
Bank D.....	4,200	1,200	680		560	6,640
Bank E.....	3,050	1,600	745	820		6,215
Total.....	\$13,050	\$5,930	\$4,075	\$7,945	\$6,290	\$37,290

Bank B collects \$1395, and Bank C \$485, to which they are, respectively, entitled. Since total debits are bound to equal total credits, the clearing house finds itself, at the end of the day, exactly where it started. And yet, through a process of bookkeeping and the payment and collection of small balances, it has managed to adjust the claims existing among all its members. In our illustration given above, credits have been set over against debits, necessitating cash payments of only \$1880 to settle claims totaling \$37,290.

The expenses of the clearing house are borne by the member banks, each paying an amount determined by its average "clearings" in relation to the total. But these expenses are comparatively slight, for the clearing house provides a very economical means of settling claims between banks. Though the volume of clearings in cities like New York and Chicago is enormous, the transactions are carried through with a surprisingly small transfer of actual money. In some cities the balances that must be paid

¹ Adapted from a table arranged by Dr. C. Louis Knight, and published in Paul F. Gemmill and associates, *An Economics Question Book*, New York, Harper & Brothers, 1931, p. 60.

are as small as 5 or 6 per cent of the total clearings. In New York in a recent year, the percentage of balances to clearings was 11.04. In the hypothetical illustration given in Table 36, the balances paid were a trifle more than 5 per cent of total clearings. It should be added that banks may, and often do, pay their balances by drafts on the Federal Reserve banks of their districts. There are in all about 600 clearing houses in the United States.

Out-of-town checks are cleared (or collected) very largely through Federal Reserve banks. If, for illustration, a merchant in Leesburg, Virginia, buys goods from a wholesaler in New York City, paying with his check drawn on the Peoples National Bank of Leesburg, collection would be made in something like the following manner. The wholesaler first takes the check, properly endorsed, to his bank in New York. This bank deposits it for collection in the Federal Reserve Bank of New York. The check is now forwarded to the Federal Reserve Bank of Richmond. The Federal Reserve Bank of Richmond sends it to the Peoples National Bank of Leesburg. The Peoples Bank now settles with the Federal Reserve Bank of Richmond. Upon receipt of this settlement, the Richmond bank immediately credits the Federal Reserve Bank of New York; and the New York bank, in turn, credits the wholesaler's bank. The collection is now complete.

It is estimated that some 95 per cent of all out-of-town (or "country") checks are collected in this way. "For settlements between the Reserve Banks there has been set up that ingenious device, the gold settlement fund, lodged in Washington with the [Board of Governors], and represented by a gold credit on the books of the Treasurer of the United States. This fund is owned by all the Federal Reserve Banks, and settlements between Reserve Banks are daily effected by bookkeeping entries, on telegraphic advice, changing the proportion of the gold fund which the different banks own."² It will be observed that this is an arrangement similar in principle to the ordinary clearing house, but operating on a much larger scale.

THE FEDERAL RESERVE SYSTEM

Our treatment of commercial banking thus far has related chiefly to banks as individual units, but we now turn to a consideration of the centralization of certain commercial banking agencies in the United States, which may be said to date from the introduction of the Federal Reserve System. The Federal Reserve Act was passed in 1913, and the Federal Reserve System began operations in the following year. It substituted a somewhat centralized system of banking for a notoriously de-

² W. Randolph Burgess, *The Reserve Banks and the Money Market*, New York, Harper & Brothers, 1936, rev. ed., pp. 94, 95.

centralized system, and was adopted chiefly for the purpose of providing (1) greater security for depositors, and (2) a larger degree of elasticity of credit. How these objectives were to be attained will be discussed after we have sketched the structure of the Federal Reserve System.³

Federal Reserve Banks. The basis of the system is twelve Federal Reserve banks, located in twelve important cities of the country. Since it was the aim of the Federal Reserve Act to coordinate to some extent all of the commercial banking operations of the United States, the country was divided into twelve "districts," known as Federal Reserve districts, and one Reserve bank was established in each district. Fig. 40 gives an

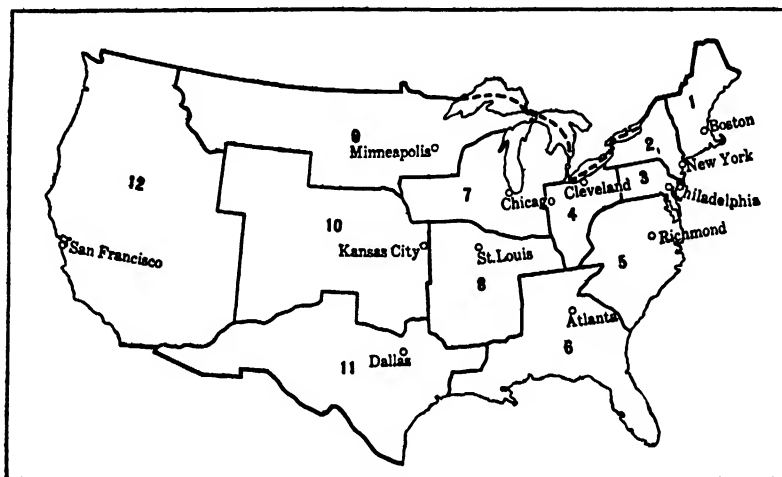


FIG. 40. FEDERAL RESERVE DISTRICTS AND CITIES IN WHICH RESERVE BANKS ARE LOCATED

idea of the territory assigned to each of the several districts. It will be seen that, in so far as area is concerned, the division is very unequal. However, the basis of division was not territorial equality, but the establishment of Reserve banks at points where they would best serve the banking needs of the country.

In addition to these twelve Federal Reserve banks, there are now in all but two of the districts (the first and the third) "branches" of the Federal Reserve banks, which have been provided for the greater convenience of those banks which are situated at some distance from a main Reserve bank. Thus, in the twelfth district the Federal Reserve bank is

³ Our treatment of the Federal Reserve System is based largely upon W. R. Burgess, *The Reserve Banks and the Money Market*, New York, Harper & Brothers, 1936, rev. ed., which gives a clear account of the organization and early operation of this development in American banking. We have also drawn upon banking experience in more recent years, and have noted changes in the System necessitated by its failure to meet some of the needs of the post-1929 depression.

located at San Francisco, but there are branches of this bank in Los Angeles, Portland, Seattle, Spokane, and Salt Lake City. In practice, then, there are in the twelfth district six centers to which Federal Reserve "member banks" of that district may apply for Federal Reserve service. There are, in all, twenty-five branches of Federal Reserve banks scattered throughout the country.

The Federal Reserve banks are not government banks, nor yet are they ordinary commercial banks. They are often referred to as "bankers' banks," and this term indicates, first, their ownership by the member banks of the districts in which they are located, and, second, the fact that they perform for the member banks much the same type of service as these member banks perform for their customers. But it is important to note—and this is true of central banks in general—that the policies of the Federal Reserve banks are molded in the interests of public welfare, and are not directed primarily toward the goal of private gain. Indeed, their dividends are limited to 6 per cent, though all profits over and above this amount may be set aside as "surplus"; and upon this fund the banks are permitted to draw in order to pay the deficits of unprofitable years.

Member Banks. Every national bank is required by the Federal Reserve Act to take out membership in the Federal Reserve System, and any state bank or trust company that has a capital of \$50,000 or more, and is approved by the Board of Governors, is eligible for membership. In acquiring membership, a bank must subscribe to stock in the Federal Reserve bank of its district to the amount of 6 per cent of its own capital and surplus; however, only one-half of this stock need be paid up, the other half remaining subject to call. The bank must also deposit all of its legal reserves with the Federal Reserve bank of which it is a member. These two items—subscription to stock in, and the deposit of reserves with, the Federal Reserve bank of the district—are the chief obligations of membership.

We have already noted the fact that each Federal Reserve bank is *owned* by the member banks of its district, and this ownership arises, of course, out of the purchase by the member banks of stock in the Reserve bank. The member banks also exercise a degree of control, but by no means complete control, over the Federal Reserve bank. Every Reserve bank is administered by a board of directors. This board is composed of nine members, and is divided into three groups of three members each. Three members are Class A directors, who are bankers elected by the member banks, which, as we have seen, are holders of stock in the Reserve bank. Three members of the board known as Class B directors, and also elected by the member banks, must be men actively engaged in industrial, agricultural, and commercial pursuits in the district. The remaining three directors, who are designated Class C directors, are selected

by the Board of Governors of the System, which will be described presently. It is assumed that Class A directors will represent the interests of the member banks, Class B directors the general economic interests of the district, while Class C directors (sometimes called "government directors") will represent the general public. The directors of each Federal Reserve bank elect a president, with the approval of the Board of Governors, for a five-year period. He is the chief executive officer.

The make-up of the Reserve bank directorship indicates fairly clearly that its function is not that of the usual commercial bank. To be sure, it is intended that a Federal Reserve bank shall aid the banking interests of the district, but the inclusion of Class B members on the board insures that those groups of business men who depend upon the member banks for the extension of credit will have their interests looked after also, while the welfare of the public, in so far as it is dependent upon the operation of a central banking policy, will presumably be safeguarded by the Class C directors. The nature of the ownership and control of Federal Reserve banks appears to justify the statement which has often been made—that they are "semi-private, semi-public institutions."

In 1946, there were 6900 member banks in the Federal Reserve System, with total assets amounting to about \$132,315,000,000. These banks represented only 47 per cent of the commercial banks in the United States at that time, but they handled 85 per cent of the country's demand deposits.⁴ It may be noted that 5007 of these member banks, or almost 73 per cent of the total, were national banks, the remainder being state banks and trust companies that had applied for and gained admission to the Federal Reserve System. Despite the advantages of Federal Reserve membership, particularly in the matter of security, some banks prefer to operate under state charters, which in many instances impose fewer restrictions on a very liberal extension of credit than do the rules of the Federal Reserve System. Thus there is the possibility of making larger profits under state than under federal regulation, but also a distinct sacrifice of safety. This statement is borne out by the fact that, in the financial crash that followed 1929, there were many more bank failures among non-member banks than among those which belonged to the Federal Reserve System.

The Board of Governors of the Federal Reserve System. General supervision and control of the Federal Reserve System are intrusted to the Board of Governors.⁵ This body consists of seven members, and has its headquarters in Washington. Each member of the Board is appointed for a fourteen-year term by the President of the United States, subject to the approval of the Senate. Not more than one of the seven may come

⁴ *Federal Reserve Bulletin*, May, 1947, pp. 562, 602.

⁵ The "Board of Governors of the Federal Reserve System" is the new name, designated by the Banking Act of 1935, for the body which, prior to that date, was known as the "Federal Reserve Board."

from any one Federal Reserve district, and it is stipulated that appointments shall be made with "due regard to fair representation of the financial, agricultural, industrial, and commercial interests, and geographical divisions of the country."

When a bank takes out membership in the Federal Reserve System, it does not thereby lose its independence of action. It ordinarily continues to function much the same as before, conducting its operations in accord with national or state laws. The twelve Reserve banks likewise are largely autonomous units in dealing with their member banks. The amounts they lend to member banks, and the rates at which the loans are made, are ordinarily determined by each Reserve bank for itself through its board of directors. But the Board of Governors acts as a coordinating body in matters that affect more than one Reserve bank, to the end that the activities of one bank shall not interfere with the proper functioning of any of the other banks.

We shall not be able to discuss in detail the many tasks of coordination, regulation, and supervision that come within the jurisdiction of the Board of Governors, but we shall see that the Board exercises a considerable degree of control over the banking operations of the United States. The functions of the Board have been summarized by a former Federal Reserve official in the following statement:

The Board prescribes regulations governing methods and procedure of Federal Reserve operations in those matters where uniformity has appeared to be necessary. Discount rates are fixed by the several Federal Reserve Banks subject to "review and determination of the Board of Governors of the Federal Reserve System," but, under the Banking Act of 1935, "each such bank shall establish such rates every fourteen days, or oftener if deemed necessary by the Board." Open-market policy is determined by an Open Market Committee consisting of seven members of the Board and five representatives of the Reserve Banks elected by the directors by geographical areas. The Board of Governors has power to change the reserve requirements of member banks under certain conditions and within certain limits and power to prescribe margin requirements on certain types of security loans by brokers and banks.

Under the terms of the Banking Act of 1933 the Board exercises special supervision over all foreign operations of the Federal Reserve Banks. The Board passes upon all applications of banks for membership in the Reserve System, after receiving the recommendation of the several Reserve Banks, and exercises a number of specific and general powers in the supervision of member banks. The Board serves as a clearing house for interdistrict settlements, arising from check collections and wire transfers. It has a force of examiners who examine the Reserve Banks periodically, and it maintains a complete statistical record and analysis of Federal Reserve operations, much of which is made public through the Board's weekly press statements, monthly bulletin, and annual report to the Congress. In addition to these and a number of other specific functions, the Board exercises general supervision over the operations of the Reserve Banks.⁶

⁶ W. R. Burgess, *The Reserve Banks and the Money Market*, p. 12.

THE SECURITY OF BANK DEPOSITS

Because the demand deposits of a bank are liable to be drawn upon at any time without advance notice being given, it has been customary to establish legal reserves of specified ratios with which to meet the demands of depositors. State banks operating under the various laws of the several states have been required to maintain against deposits certain minimum reserves specified in the state banking acts. The result has been a decided lack of uniformity as between states. The reserves required of the national banks, prior to the passage of the Federal Reserve Act in 1913, were laid down in the National Bank Act, and applied to all national banks throughout the country, regardless of state boundaries, though the percentages required differed with the classes of cities in which the banks were located.

Bank Reserves Under the National Bank Act. The Federal Reserve Act applies only to banks belonging to the Federal Reserve System, as the National Bank Act of the pre-Reserve era applied only to national banks. Under both of these Acts, the banks of the country were divided into three groups, depending upon whether they were located in very large cities, cities of moderate size, or small cities or towns. These groups were classified as "central reserve city banks," "reserve city banks," and "country banks," respectively.⁷ Central reserve city banks and reserve city banks were required to maintain reserves amounting to 25 per cent of their total deposits, and the percentage for country banks was 15. These reserves took the form of lawful money, and in the case of central reserve city banks the whole of the legal reserve had to be kept *in their vaults* in readiness to meet the demands of depositors. Reserve city banks were required to keep one-half, and country banks two-fifths, of the specified reserves in their own vaults. The remainder they were permitted, if they wished, to deposit with approved banks in other cities. The reserve city banks could deposit one-half of their legal reserves in central reserve city banks, and the country banks three-fifths of their legal reserves in reserve city banks.

Since reserves thus deposited drew interest, while reserves held in their own possession did not, many of the banks cut down to the bare legal minimum the amount of legal reserves actually held in their vaults. Out of this situation arose the practice known as the pyramiding of reserves, which tended to weaken the ability of banks to mobilize their reserves in case of need. Let us suppose, for example, that a Philadelphia national bank had on its books demand deposits amounting to \$4,000,000. Since Philadelphia is a reserve city, the legal reserve against these deposits was

⁷ New York and Chicago are now the only central reserve cities: 62 other cities (mostly large but some of only moderate size) have been designated as reserve cities; and all others are regarded, for Federal Reserve purposes, as "country" areas.

25 per cent, or \$1,000,000. But one-half of this amount could be deposited with a New York (central reserve city) bank, leaving in the vaults of the Philadelphia bank only \$500,000 as a reserve immediately available for the payment of \$4,000,000 of demand deposits which might be called for at any time. Presumably, the Philadelphia bank could also recall at will the \$500,000 deposited with the New York bank. But the New York bank was at liberty to treat this "reserve" as it would treat any other deposit; that is, it could and probably would retain in its vaults merely the 25 per cent reserve required by law, lending out the other 75 per cent, or \$375,000, at interest. If we imagine a series of "bank runs" injected into this situation, it is easy to see that the New York bank might find it difficult, or even impossible, to return the \$500,000 deposit on demand, and the Philadelphia bank in turn, in the absence of this part of its legal reserve of \$1,000,000, might be forced to close its doors because of its inability to pay on demand the claims of its depositors.

It might be suggested, of course, that even the full legal reserve of \$1,000,000 would be a small amount with which to try to meet outstanding deposits totaling \$4,000,000. And, indeed, it was discovered that the National Bank Act reserves of 25, 25, and 15 per cent did not always enable a bank to meet its legal obligations when confronted with a long line of insistent depositors clamoring for the payment of their claims. However, the difficulty lay not so much in the inadequacy of reserves as in the fact that, before the adoption of the Federal Reserve Act, every bank was, in time of emergency, very largely "on its own." Since the function of a commercial bank is to lend out its funds, no such bank can hope to have in its vaults sufficient money to pay off all its depositors if they happen to present their claims at about the same time. When, under the National Bank Act, there developed in a given community a lack of confidence that took the form of runs on the banks, it was pretty much a matter of every bank for itself. One might perhaps expect neighboring banks to come to the aid of a bank in distress, lending it funds with which to pay off its depositors and thus helping to restore confidence throughout the community. This, to be sure, sometimes happened. But it is equally true that a besieged bank often called for help, and called in vain because other banks felt that they must hold fast to whatever reserves they had on hand so that they might meet the demands of their own depositors if the need should develop.

Centralization of Reserves Under the Federal Reserve Act. The Federal Reserve Act undertook to overcome the inadequacy of bank reserves to meet the demands that might be made upon the banks by their depositors. The purpose, of course, was to effect an arrangement which would make it possible for every sound bank to remain open, in contrast to the old system of reserves under which many a bank had been forced to close though its assets were greater than its liabilities. In the matter of

demand deposits, the immediate payment of claims upon demand is imperative, and the fact that a bank has assets on which it could realize within a month or two will not save it from disaster if requests for the payment of demand deposits are not met when made.

The new method of handling reserves involved not an *increase* in the size of reserves, as one might have expected, but instead a *decrease*. Under the National Bank Act, the reserve requirements for demand deposits and time deposits were the same, being 25, 25, and 15 per cent for central reserve city banks, reserve city banks, and country banks, respectively. With the passage of the Reserve Act in 1913, these requirements were changed to 18, 15, and 12 per cent for demand deposits, and in 1917 they were lowered to 13, 10, and 7 per cent, according to the class of the city in which the bank was located. The reserve against time deposits, applying uniformly to all member banks throughout the Federal Reserve System, was set at 5 per cent in 1913, and lowered to 3 per cent in 1917. (As was explained earlier in the chapter, the reserve requirements, since October 3, 1942, have been 20, 20, and 14 per cent on demand deposits, and 6 per cent on time deposits.) All legal reserves must be deposited with and held by the Federal Reserve bank of the district. The member banks do not receive interest on these reserve balances held by the Reserve banks.

This policy of pooling reserves enables the Reserve bank to give aid to any member bank upon which the depositors are drawing heavily. Formerly, the individual bank was expected to fight its own battles and to have on hand at all times a reserve large enough for any emergency. As we have seen, the reserves were often insufficient to meet the needs of the occasion. With the reserves of all member banks under the control of a central agency, the Federal Reserve bank of the district, further funds can readily be extended to the particular bank that needs them. Each district is so large that it is improbable that all banks throughout the area will require aid at the same time. It is scarcely likely, for example, that all of the six hundred and fifty member banks of the third district will need the assistance of the Reserve bank of the district at the same time. But all have deposited with the Reserve bank funds which form a large pool of reserves which are available for the use of any sound bank or banks that may need help. Further safeguards are the authorization to Reserve banks to "make advances to a member bank on its time and demand notes having maturities of not more than four months and which are secured to the satisfaction of the Federal Reserve bank," and the power of the Board of Governors to shift reserves from one Reserve district to another in time of emergency.

The principle involved in the centralization of reserves is similar to the principle of insurance. There is safety in numbers, for as numbers are increased the risk is spread. Since it is impossible to tell in advance which bank is going to be hard pressed, it was necessary under the old system

for every bank to be prepared for the emergency. With the Reserve banks and the Board of Governors standing ready to give assistance whenever and wherever it may be needed, there is no necessity for so large a total reserve as heretofore. The device through which aid is ordinarily given is the rediscounting process, which will be described presently.

The Guaranty of Bank Deposits. For some years after the adoption of the Federal Reserve Act, it seemed that the financial panics that had often accompanied business depressions were a thing of the past. But the post-1929 depression wrought such havoc among the commercial banks of the country that there was no question that the banking system of the United States was still far from perfect.

The causes of this heavy toll of bank failures will be discussed in the following chapter. We wish here merely to note the fact that the loss of the holdings of hundreds of thousands of depositors led to a demand for the federal insurance of deposits. The result was the creation of a plan of federal deposit insurance, the details of which will also be presented in the next chapter.

THE ELASTICITY OF CREDIT

Commercial banks are operated primarily to supply credit to business men. If our enterprisers had the same credit needs from month to month and year to year, and hence required commercial credit in a continuous stream of uniform volume, the problem of providing elasticity of credit would be one of minor importance.

But the economic activities of society vary greatly in volume from time to time, and the demand for credit varies correspondingly. The arrival of payday may cause a great industrial concern to call upon its bank for a hundred thousand dollars in cash with which to meet its payroll. The first day of every month, or the first few days of the month, will ordinarily witness the payment of literally millions of book accounts or other obligations that have been running for some weeks. Bankers in agricultural areas are expected to "carry" their customers during certain parts of the year by lending to them until their crops have been harvested and sold. Large amounts of credit must be available, not throughout the entire year but at certain times, to "move" the corn crop, the wheat crop, and other farm products that run into hundreds of millions of dollars. Manufacturers must be financed so that they may pay for labor, power, and raw materials while engaged in making seasonal goods for, let us say, the Easter trade or the Christmas rush. Finally, there are years of depression when but little credit is used, and years of business boom when credit facilities may be strained to the limit.

It is clear, then, that a supply of credit that is adequate for financing business at certain times may be quite insufficient for other times. Hence,

there is need for an elasticity of credit that will meet the requirements of legitimate business under varying conditions, whether the quantity of credit demanded is large or small.

The Process of Rediscounting. The Federal Reserve Act undertook to provide elasticity of credit through the agency of the rediscounting process. We have noted that Federal Reserve banks are often spoken of as bankers' banks, and that this title arose in large part from the fact that the relationship between a Reserve bank and its member banks is much the same as that which exists between a member bank and its customers. Probably nowhere is this parallel relationship seen more clearly than in the handling of commercial paper; for the *discounting* of commercial paper, which is one of the most important functions performed by a member bank for its customers, is matched by the *rediscounting* of this same commercial paper, which is one of the chief services rendered by a Reserve bank to its member banks.

Business men ask their banks to discount commercial paper for them when they must secure cash or increase their bank deposits in order to meet their obligations. Member banks ask the Reserve banks to rediscount commercial paper (that is, to discount again the paper which the member banks have already discounted for their customers) when they, the member banks, must secure cash with which to meet an emergency, or cash or increased balances with the Reserve banks which will enable them to extend further loans to their customers. However, throughout our discussion of rediscounting, the reader should bear in mind a provision in the Glass-Steagall Act of 1933 which reads as follows: "Discounting at Federal Reserve banks is definitely made a privilege, rather than a right, in that 'shall' is changed to 'may' in the phrase 'shall discount for members.'" From this provision it is clear that a Reserve bank has the power to limit its extension of credit to member banks.

Rediscounting to Increase Legal Reserves. It will be recalled that a member bank must maintain with the Federal Reserve bank of its district a reserve of 13, 10, or 7 per cent (changed to 20, 20, and 14 per cent as of October 3, 1942) against the demand deposits of its customers. In depositing these reserves, the member banks acquire claims against the Reserve banks. Whenever their deposits with the Reserve banks are larger than are needed to fulfill their legal reserve requirements, member banks may withdraw the excess portion of their balances. For example, a "country bank" which owed its customers \$100,000 in the form of demand deposits would have to maintain a reserve of \$7000 (or 7 per cent) with its Reserve bank; but if these demand deposits were reduced to \$50,000, the bank could withdraw \$3500 of its deposit with the Reserve bank and still leave a sufficient balance to fulfill the legal reserve requirements. If, on the other hand, this bank wished to increase the demand deposits of its customers from \$100,000 to \$200,000, it would be required also to increase its reserves

(that is, its balance with the Reserve bank) from \$7000 to \$14,000. It could do this by borrowing from the Reserve banks in much the same manner as business men borrow from member banks. .

This process of borrowing by business men, as was emphasized earlier in the chapter, usually takes the form of discounting commercial paper. That is to say, the bank lends credit in the form of a bank deposit, accepting as security for the payment of the loan some sort of acceptable credit instrument. The process of rediscounting consists of a member bank taking this instrument to a Reserve bank and asking the Reserve bank to accept it as security for a loan to the member bank. In this way, commercial paper of approved types is made to do double service, forming the basis, first, of a loan from the member bank to a customer, and, later of another loan from the Federal Reserve bank to the member bank.

The only commercial paper that is regularly eligible for rediscount is short-term credit instruments which relate to actual business transactions. We have here a provision which indicates that the Federal Reserve System is designed to facilitate the extension of commercial credit and not investment credit. Short-term paper is defined as paper which matures within ninety days, but agricultural paper is acceptable if it does not run beyond nine months. Furthermore no paper is eligible for rediscount if it has arisen from transactions in stocks or bonds. Since the rediscounting process requires endorsement by the member bank all rediscounted instruments are "double-name paper."⁸

Not only does eligible commercial paper result from actual business transactions but the need for credit expansion also arises out of such transactions. And so it happens that just at the time when business is brisk, with requests for more and more credit coming in to the banks, there is being created also a large quantity of commercial paper that can be exchanged, so to speak, for the desired credit. For the member banks can have this paper rediscounted at the Federal Reserve banks and thus increase their balances; and on the strength of these enlarged balances, which serve as legal reserves, they are entitled to extend further credit to their customers in the form of bank deposits. In this way an expansion of credit is made possible when it is most needed. But it should be noted that this use of the rediscounting privilege is regarded as distinctly an emergency measure.

As a safeguard against the undue expansion of bank deposits, the Federal Reserve banks, as well as member banks, are required to set up legal reserves against the claims of depositors as represented in demand deposits. Back of every deposit extended to a member bank by a Federal Reserve bank, the Reserve bank must maintain a 100 per cent reserve, of which

⁸It should be noted that emergency banking legislation of the post-1929 depression period conferred temporary eligibility upon several other types of paper, which were to be discounted, however, only "in unusual and exigent circumstances."

at least 25 per cent (reduced from 35 per cent as of June 12, 1945) must be in the form of gold certificates or other lawful money, and the remainder in commercial paper. A further safeguard against excessive expansion is the interest charge made by Federal Reserve banks on all loans that are due from member banks. Since the only way to escape the payment of interest is to pay off the loan, there is every incentive for member banks to redeem their commercial paper pledges as promptly as possible. When business men no longer need large amounts of credit and hence reduce their indebtedness to their banks, these banks in turn are likely to reduce their loans from the Reserve banks in order to effect a saving in interest.

An Illustration of Elasticity of Credit. Since a reserve of only 25 per cent in gold certificates or lawful money is required (in addition to commercial paper) as security against deposit accounts in Federal Reserve banks, a gold dollar in a Reserve bank⁹ may be used as the basis of a \$4.00 credit on deposit. Consequently, a \$1.00 gold certificate in the possession of a Reserve bank will enable that bank to extend to member banks \$4.00 in credit; and member banks as a whole, in turn, will be able to extend a much greater amount of deposit currency to their customers. For the \$4.00 on deposit with the Reserve bank serves as a reserve, and is sufficient security to enable the member bank to give credit to the amount of approximately \$30.77, \$40.00, or \$57.14, depending upon whether the institution is a central reserve city bank, reserve city bank, or country bank. For \$4.00 is 13 per cent, 10 per cent, and 7 per cent, respectively, of the three amounts that we have mentioned. (This calculation is based upon the member bank reserve requirements in effect August 15, 1936, which have since been changed several times, as we have explained. Because the current reserve requirements are 20, 20, and 14 per cent, respectively, for the three classes of banks, the theoretical volume of credit which could today be based upon a \$1.00 gold certificate is \$20.00, \$20.00, and \$28.50.)

The case may be stated in a slightly different way. If a business man wished to borrow \$40.00 from a reserve city member bank, the bank would have to increase its reserve with the Federal Reserve bank to the extent of 10 per cent of this loan, or \$4.00. And the Reserve bank would need only \$1.00 in gold, plus \$3.00 in eligible commercial paper, to enable it legally to credit the member bank's account with this reserve of \$4.00.

Of course, the expansion of credit that actually takes place is not so great as we have imagined in our illustration. Indeed, it has been shown that the necessity for keeping on hand sufficient cash to meet the demands that may be made by depositors makes it impossible to extend anything like so large an amount of credit as we have suggested above would be

⁹ As we have explained, the gold itself is actually held in the Treasury, and Reserve banks hold gold certificates which are virtually "warehouse receipts," but are redeemable in gold only at the discretion of the Secretary of the Treasury.

legally permissible.¹⁰ Generalizations in such matters are risky, and because of their inexactness are often worthless; but our example of the maximum expansibility shows that gold under the Federal Reserve System is much more useful as a reserve than as a direct medium of exchange. However, it is a principle of Federal Reserve policy that reserve funds should be used (either paid out or employed as a basis for credit) whenever they are genuinely needed, but should not be used beyond that need. The determination of what are genuine needs is a major problem.

Rediscounting to Secure Federal Reserve Notes. The ability of member banks to increase their loans to customers depends not only upon enlarging their balances with the Reserve banks and thus gaining the privilege of expanding the volume of demand deposits, but also upon having sufficient "till money," or ready money, with which to cash the checks which customers write against their deposit accounts. Here, again, is a financial problem for which the Federal Reserve System has provided a solution.

Just as the business man looks to his bank to supply money with which to meet his payrolls, so the member bank turns to its Reserve bank when in need of ready cash to hand out over the counter. This need, like the need for larger reserves, may be met through the process of rediscounting. When a member bank presents acceptable commercial paper to the Reserve bank, it may ask either for an addition to its deposit account, in the manner that we have described, or for immediate funds in the form of Federal Reserve notes. If its supply of till money is unduly depleted, it will doubtless choose the notes, which will be readily accepted by its customers when they present checks against their deposits.

Long before the inception of the Federal Reserve System, it was recognized that the inflexibility of bank note issue was a serious handicap. In times of industrial boom, when prices are mounting and business is expanding, there is a demand not only for more credit but for more actual money. Even more vital is the ability to secure funds when the boom has reached its peak, when there are anxiety and uncertainty in the air, and credit has been strained to the utmost. If the banks cannot lend aid in the face of such a crisis, bankruptcy may easily be the fate of business men whose assets are ample but unhappily are not sufficiently liquid to enable them to meet the pressing obligations of the moment.

Why could not the banks, in a situation such as this, have extended further credit to their customers? Because, first of all, bank deposits would already have been stretched just as far as possible in view of the necessity of maintaining legal reserves against deposit accounts; and because, in the second place, the conditions of *national* bank note issue were such that *this* form of credit could not readily be expanded in time of emer-

¹⁰ See, in this connection, C. A. Phillips, *Bank Credit*, New York, The Macmillan Company, 1921, chap. 3.

gency. For the banking laws relating to these issues demanded that national bank notes be secured by a 100 per cent deposit of government bonds, plus a redemption fund of 5 per cent in lawful money. Therefore, a shortage of government bonds might have proved to be a very real stumbling block at a time when more bank notes were needed. For the government bonds that could be used as backing for note issues were limited in number, and most of them, as a rule, were already serving as security for issues of bank notes.

The Federal Reserve solution of this problem was to substitute commercial paper for government bonds as security against notes issued to meet the demands of business expansion. We are referring, of course, to the issuance of Federal Reserve notes through the process of rediscounting. When the member bank presents eligible commercial paper for rediscount and asks for Federal Reserve notes, the Reserve bank must deliver as security to the Federal Reserve Agent (who is the official representative, in the Federal Reserve bank, of the Board of Governors) gold certificates to the amount of 25 per cent (reduced from 40 per cent, as of June 12, 1945) of the issue, with the remainder in the form of acceptable commercial paper. In addition to this collateral fund of 100 per cent, Federal Reserve notes are backed by the assets of the issuing bank, and their payment is guaranteed by the United States government. Consequently, elasticity of bank notes has been attained through the rediscounting process without any reduction in safety.

There is a tendency for Federal Reserve notes to move back to the bank of issue once the need for them has passed. When currency is again abundant and the member bank has more bank notes available than are necessary to meet the needs of its customers, it ordinarily returns as promptly as possible the Federal Reserve notes that it has borrowed, thus putting a stop to the interest charge. Member banks, being profit-seeking organizations, aim to keep in their immediate possession only such money as will be needed to satisfy the requirements of those with whom they transact business. Any surplus that they may have is sent to the Reserve bank, where it can be used to cancel loans or to serve as a legal reserve.

The rediscounting process is "a very present help in trouble," such as a bank faces when its depositors start a run upon its resources. If the bank's total volume of deposits is large, so that it will need a great deal of money with which to pay the depositors, it should also have in its vaults a large quantity of commercial paper. If it has pursued a sound commercial banking policy, lending on short-term commercial paper arising out of actual business transactions, it will have an abundance of such paper and will experience no difficulty in rediscounting this paper, and obtaining Federal Reserve notes with which to pacify its depositors. Probably there is no better way to stop a bank run than to pay the claims of depositors not only readily, but even eagerly! More than one depositor has been paid off in

full, only to fall in again at the end of the line and redeposit his entire receipts, once he has satisfied himself that his money could be had if he really wanted it. And more than one bank run has been stopped by the appearance on the scene of a Federal Reserve truck carrying bales of Federal Reserve notes. The rediscounting feature of the Reserve System has aided materially in lessening the terrors of a financial panic.

1. What is "credit money"?
2. Explain the distinction between *investment* credit and *commercial* credit.
3. What two types of capital result from the creation of these two forms of credit? Explain.
4. "When *properly endorsed*, a note becomes '*negotiable*.'" Explain the italicized terms.
5. What is the process of "discounting"?
6. There are several forms of the "draft," but all are based on the same general principle. What is this principle?
7. What is "double-name paper"?
8. What are the chief functions of the commercial bank?
9. Explain the relationship between "loans and discounts" and "deposits."
10. What is deposit currency? Give a synonym for this term.
11. What is the quantitative relationship between *money in circulation* and *deposit currency* in the United States?
12. What is a demand deposit?
13. Describe ways in which a demand deposit may be created.
14. What are the regulations governing the issuance of deposit currency? Why are such regulations necessary?
15. Of what significance is the statement that "commercial banks deal mainly with *short-term* obligations"?
16. Describe the workings and state the purpose of the clearing house.
17. The transactions of the clearing house "are carried through with a surprisingly small transfer of actual money." Illustrate.
18. Explain the way in which the Federal Reserve banks facilitate the clearing of checks. What is meant by the word "clearing" as here employed?
19. What is the "gold settlement fund," and how is it used?
20. What two specific objectives led to the inauguration of the Federal Reserve System?
21. What is a Federal Reserve bank, and where are the Reserve banks located?
22. What is the significance of the statement that Federal Reserve banks are "bankers' banks"?
23. What is a member bank, and how does a bank secure membership in the Federal Reserve System?
24. By whom are the Reserve banks owned, and by whom controlled?
25. Explain the suggestion that Federal Reserve banks are "semi-private, semi-public institutions."
26. To what extent are the commercial banking agencies of the country allied with the Federal Reserve System? Be specific.

27. Describe the organization of the Board of Governors of the Federal Reserve System, and enumerate and explain its powers.
28. What changes were made in the handling of bank reserves through the provisions of the Federal Reserve Act? What are the present reserve requirements for demand deposits and time deposits?
29. What was the purpose of changing the legal reserve requirements?
30. Why is there need for elasticity of credit in the banking system of the United States?
31. State concisely the nature of the process of rediscounting.
32. Describe the rediscounting process when used for increasing legal reserves.
33. What are Federal Reserve notes?
34. What function are these notes supposed to perform?
35. How does the plan of issuance of these notes facilitate the performance of this function?
36. Describe in detail the method of providing a larger degree of elasticity of credit by expanding and contracting the issue of Federal Reserve notes.
37. In what respects, if at all, is the issuance of Federal Reserve notes superior to that of national bank notes in meeting the needs of a complicated industrial society?
38. How may the issuance of Federal Reserve notes be used advantageously in stopping a bank "run"?

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Significant Issues in Commercial Banking

IN THE LAST CHAPTER WE DESCRIBED THE FUNCTIONS OF COMMERCIAL BANKING in our modern economy, and outlined the system which undertakes to perform these functions for the people of the United States. In the course of our examination, we saw that in several respects the system has failed to meet fully the banking needs of the country. We shall now inquire more closely into some of the problems of commercial banking as they appear today.

THE PROBLEM OF ELASTICITY

The Nature of Elasticity. One essential characteristic of a sound commercial banking system is elasticity of currency and commercial credit. Perfect elasticity is unattainable unless the following three conditions are met: First, the *amount* of currency and commercial credit in use must be able to expand and contract. Second, the expansion and contraction of currency and commercial credit must be coordinated, *in point of time*, with the changing needs of business and economic activity in general. Finally, the *extent* of expansion and contraction must also be coordinated with these changing needs.

Under these conditions, money and commercial credit will be able to perform their legitimate function of facilitating the operation of economic activity. They will not be issued in ways and amounts that will raise general prices, stimulate business activity, increase profits, reduce real wages and labor's purchasing power, lead to overinvestment in plant and equipment, and otherwise bring about conditions which will later lead inevitably to business depression; nor will they be decreased so sharply as to precipitate business crisis, liquidation, and depression. Money and commercial credit are legitimate devices for avoiding the inconveniences of barter, and for facilitating business operations. But this issuance should not be allowed to affect the volume of these operations, or to cause instability in economic activities.

The Control of Money and Credit. Money and commercial credit

have not been perfectly elastic under the Federal Reserve System, for only two of the essential conditions of elasticity have been met. In violation of the third condition, the extent of expansion and contraction has not been closely coordinated with the changing needs of business. The movements of the general price level and the violent fluctuations in the volume of economic activity which have occurred since 1913 indicate a tendency for the total volume of money and credit to become overexpanded in some periods and overcontracted in others. Despite the powers vested in the System for credit control, the issuance and withdrawal of money and credit have sometimes been allowed to stimulate business artificially, and at other times have made for depression. In other words, money and credit have not been confined to their legitimate neutral rôle of facilitating exchange. These unhappy results are attributable in part to a lack of sufficient authority, and in part to conditions which are inherent in the administration of any system of credit control.

The Control of Rediscount Rates. One of the powers originally granted the Federal Reserve System for controlling money and credit was authority to raise and lower the rediscount rate. When an undue expansion of credit seems imminent, the Reserve banks can raise their rediscount rates, with the approval of the Federal Reserve Board (now the Board of Governors of the Federal Reserve System). Such increases mean, in effect, an increase in the prices which member banks have to pay for additional money or credit—that is, for loans extended to the member banks on the basis of eligible commercial paper endorsed by them and pledged with the Federal Reserve banks. The results which are expected to follow changes in rediscount rates are quite clear in theory. Increases in rates make it more expensive than formerly for member banks to obtain credit from Reserve banks. It should follow that the member banks will charge their customers higher rates for additional commercial credit and that the customers will consequently limit their new loans, and extensions of old loans, to amounts which are absolutely essential. When this occurs, the expansion of credit will be checked. Similarly, lowering the rediscount rates when business is slack is supposed to make it easier for member banks and their customers to borrow, and thus encourages them to increase their loans.

The Effectiveness of Changes in Rediscount Rates. In actual practice, however, raising and lowering the rediscount rates has not been an effective device for controlling the expansion and contraction of money and commercial credit. In the first place, a considerable expansion of credit sometimes gets under way without recourse to rediscounting by member banks, because they have large reserves idle at the beginning of a period of active business. In the second place, when a bank rediscounts in order to increase its reserves with a Federal Reserve bank, it acquires a greater lending power than appears on the surface. If a bank

adds \$1000 to its reserve by rediscounting, it is enabled to lend more than that sum to business men in the form of demand deposits, even if other member banks are not doing the same thing. This is possible because loans in the form of demand deposits are not always entirely checked out by the borrowers, and when checks are drawn against such deposits, they are often redeposited in the same bank. Thus, a bank, by obtaining \$1000 through rediscounting at 5 per cent, is enabled to lend a somewhat larger amount to business men at 6 per cent. And even if the rediscount rate is raised, the bank may continue to lend extensively and profitably to its customers without charging them more than the former rate of interest, namely, 6 per cent.

Of course, when a member bank obtains an additional reserve of \$1000 in this way, it has the *legal* right to increase the demand deposits of its customers by lending (by any amount up to \$10,000, on the average) on the basis of the small legal reserve normally required against demand deposits. This right, however, cannot be exercised by one bank alone. If a single bank expanded its deposits in this way, the enlarged deposits would cause a very large number of checks to be drawn against the bank by its depositors. The clearing-house claims against this bank would then be much larger than the bank's claims against the other banks in the clearing house. These daily net adverse balances would eventually drain away much of the bank's working cash, and force it to reduce its deposits. However, when all or most member banks are rediscounting and expanding credit, a given bank may reach something approaching the maximum legal average expansibility of ten times the amount of reserve added by rediscounting; for under these circumstances the checks drawn by its customers against demand deposits are largely offset by the checks it receives which are drawn on other member banks. If this is the situation, even a 5 per cent rise in the rediscount rate would mean a rise of only one-half of one per cent, or a little more, in the interest rate charged to business men. In practice, the member banks might not raise their interest rates at all.

Even if this policy of Federal Reserve control succeeded in raising the rates which member banks charged business men, the rise might not check borrowing greatly. When a business man expects to make a profit of 10 or 20 per cent by using borrowed funds, he is unlikely to be restrained by the necessity of having to pay, say, an additional one per cent for these funds. Finally, it is entirely possible that our domestic policy of control might be upset by concerns in foreign countries, should they decide to take advantage of the high interest rate by making us extensive loans. And even domestic corporations with idle funds might throw them into the market if the interest rate obtainable were very high.

Ineffective as changes in rediscount rates have been in preventing the overexpansion of credit, they have been even less successful in checking

its contraction. In periods of poor business, there is ordinarily little or no rediscounting, so that a lowering of rediscount rates means little. At such times, member banks are likely to lower their interest rates to business men in any case. The truth is that, in a period of declining business, enterprisers do not want to borrow from member banks for normal commercial credit purposes, and the banks are not anxious to lend. When a business man thinks he cannot make profits by using borrowed funds, he is unlikely to borrow even if the interest rate is only one per cent.

Open-Market Operations. The other major power originally given to the Federal Reserve System for controlling commercial credit is open-market operations. This device functions through the rediscount rate, though indirectly. When there is danger of commercial credit being overexpanded, the Federal Reserve banks may decide to sell, say, a billion dollars' worth of government bonds in the open market. These securities will be bought by business men, corporations, banks, and other financial institutions. Let us suppose, for the sake of simplicity, that they are all bought by business men who pay the Federal Reserve banks with checks against demand deposits in member banks. These checks will be charged by the Federal Reserve banks against the reserve accounts of the member banks. This will lower the legal reserves of the member banks by a billion dollars, and the demand deposits which they may legally carry for business men by roughly ten times this amount. Hence, the member banks will have to curtail credit or replenish their reserves by rediscounting at the Reserve banks. If they do the latter, they will find that they must pay higher rediscount rates than before. In this way, the open-market operations are intended to make the changes in rediscount rates effective. However, since open-market operations must work through changes in rediscount rates, they cannot be more effective in checking credit expansion than a change in the rediscount rate itself would be.

When business is slack, the purchase of securities in the open market by the Federal Reserve banks is expected to increase the reserves and idle funds of the member banks, and thus stimulate lending by these banks. Here, again, the open-market operation is not likely to be effective. If idle funds are thrust upon member banks through open-market operations, the banks will probably use them to reduce their debts and increase their liquidity, or to purchase government bonds, rather than to make new loans to business men.

Other Factors in Credit Control. Changes in rediscount rates and open-market operations were, until recent years, the only means by which the Federal Reserve System could control the expansion and contraction of commercial credit, unless one includes the doubtful measures of persuasion and exhortation. However, even if the powers of control were adequate, there would remain the difficult matter of deciding just when to use them. To determine precisely when the further issuance of money

and credit would be unsafe, the officials in charge would have to possess almost superhuman knowledge and ability. And yet the controls must be applied at exactly the right time if they are to be effective and not restrain desirable business activity. Even if it were possible to determine exactly when control should be exercised, it would take great courage to adopt the necessary measures at that time, in the face of the economic, political, and international pressure which might be exerted by those who would be adversely affected.

Additions to Control Powers. In the Banking Acts of 1933 and 1935, changes were made in the organization of the Federal Reserve System and in its credit control powers. The Board of Governors of the Federal Reserve System (formerly called the Federal Reserve Board) now consists of seven members, who are appointed by the President of the United States with the approval of the Senate. In the Act of 1935, it was specified that Board members should serve terms of fourteen years each at a salary of \$15,000 per annum, that their terms should expire in rotation, and that members could not be reappointed. These changes were intended to increase the independence and detachment of the Board, and to enable it to exercise its powers, when necessary, without fear of outside influence.

Increased powers were also granted the Board of Governors of the System. This Board now constitutes a majority of the membership of the Federal Open-Market Committee, and can control its decisions. Formerly this Committee of twelve was elected to represent the twelve Federal Reserve banks. Today, only five of the twelve represent these banks. Moreover, the decisions of the Committee to engage or not engage in open-market operations are now binding on the Reserve banks. These banks must submit their proposed rediscount rates to the Board of Governors at least once in every two-week period, and the rates must be approved by the Board before they become effective. This gives the Board of Governors control, for all practical purposes, over the rediscount rates charged by the Federal Reserve banks.

In addition to being given direct authority over rediscount rates and open-market operations, the Board has received other new powers for controlling commercial credit. First, it may now increase the reserve requirements that member banks must hold against demand and time deposits, by any amount up to double the long-established requirements of 13, 10, and 7 per cent (3 per cent for time deposits) for the three classes of member banks. (The Board actually raised and lowered these reserve requirements several times between 1935 and 1942. Since October, 1942, the requirements have remained at 20, 20, and 14 per cent for demand deposits and 6 per cent for time deposits.) Doubling the reserve requirements has the effect of reducing by one-half the ability of member banks to extend demand deposits to business men on the basis of a given amount of reserves.

The Board of Governors may fix, for each Federal Reserve district, the percentage of a member bank's capital and surplus which may be extended to borrowers in the form of loans secured by stock and bond collateral. This percentage may be changed upon ten days' notice. After investigation and hearing, the Board may deny the credit facilities of the System to any member bank which appears to be lending too extensively for speculation in securities, real estate, or commodities. This power permits the Board to refuse rediscounting facilities for speculative purposes, while allowing credit to be expanded for normal business operations. Through its control over "margin" requirements, the Board also determines the percentage of the market values of securities that member banks may lend. Finally, the Board may suspend or remove any officer or director of a Federal Reserve bank, or of member banks, for continued violations of law, or unsafe and unsound banking practices.

These changes have greatly strengthened the control of the Federal Reserve System over the expansion of commercial credit. If the Board of Governors should decide to raise rediscount rates and to engage in open-market operations, and at the same time should raise to the limit the legal reserves for demand deposits of member banks, adjust margin requirements and the use of bank credit for speculative purposes, and cut off rediscounting facilities for erring member banks, it should be able to halt a movement toward the overexpansion of credit *in any ordinary situation*. It remains true, however, that credit control must be exercised wisely and courageously if desirable ends are to be reached.

Up to the present time the Board's new powers for controlling the expansion of bank credit have not received a fair trial. These powers were granted only a few years before the United States became involved in World War II and an emergency situation arose in which it became impossible to control the expansion of bank deposits and money in circulation. Participation in the war brought about an increase in federal expenditures from \$12,774,000,000 in 1941 to \$93,744,000,000 in 1944 and \$100,405,000,000 in 1945.¹ This increase was financed in part by sharp rises in taxation and by the sale of government bonds to individuals and business firms. These methods of government finance are considered non-inflationary, since they reduce purchasing power in the hands of individuals and firms and increase it in the hands of the government. However, another large part of the increase in governmental expenditures was financed through the sale of government bonds to the banks, and this method of finance is definitely inflationary because, in this process, individuals and firms do not give up funds as the government acquires them.

The point is that when banks purchase government bonds, they pay for them by setting up demand deposits for the federal government. When

¹ *Federal Reserve Bulletin*, October, 1945, p. 1047.

the government spends these deposits, the funds find their way directly or indirectly into the hands of individuals and firms and are redeposited in the banks, where they become private rather than governmental deposits and can be used by their owners for any productive or consumptive purpose. In such a situation there is little the Board of Governors of the Federal Reserve System can do to limit the growth of bank deposits. Thus, the total deposits of all *member* banks increased from \$61,717,000,000 on December 31, 1941, to \$118,378,000,000 on June 30, 1945.² For *all* banks in the United States, demand deposits increased from \$44,316,000,000 to \$96,730,000,000, and time deposits from \$26,476,000,000 to \$41,710,000,000, over the same period, while money in circulation in the United States increased from \$11,160,000,000 to \$27,108,000,000.³ Under the circumstances, the government's desire to prevent a wild inflation of prices had to find expression in direct price control, as we shall see in Chapter 36.

Ever since the end of World War II, the Board of Governors has apparently been committed to a policy of low interest rates, in coordination with the similar policy of the federal government itself, and open-market operations have been confined to repeated purchasing of government bonds in supporting the market for these securities. Rigid adherence to these policies will preclude the use of open-market operations and manipulation of interest rates as devices for controlling the expansion and contraction of credit.

THE PROBLEM OF SAFETY

In the last chapter we saw that national banks were unable to provide adequate safety for depositors under the National Bank Act. The reserve requirements behind deposits were large, but each bank had to depend upon its own resources in time of trouble. There was no central agency to supply additional funds when depositors became impatient, and no process of rediscounting through which funds could be obtained. Moreover, a bank would often have trouble in bringing its own reserves into play, because part of these reserves was commonly deposited at interest with other banks and might not be available in time of need.

Safety Under the Federal Reserve System. One of the purposes of the Federal Reserve Act, as originally passed, was to alter these conditions so as to provide safety for the depositors of member banks. Though the actual percentages of reserves required against deposits were reduced rather than increased, every member bank was compelled to keep its reserves in the Federal Reserve bank of its district, without interest. Then, in case of emergency, the Reserve bank could place at the disposal of a

² *Ibid.*, p. 1032.

³ *Ibid.*, pp. 1029, 1032.

distressed bank not only the member bank's own reserve, in the form of cash, but additional funds from the great pool of reserves which it held for the other member banks of the district. For the Federal Reserve Act provided that a member bank should be permitted to obtain additional funds, when necessary, by rediscounting eligible commercial paper at the Federal Reserve bank. It was thought that this provision would make it unnecessary for a member bank to close its doors because of inability to obtain funds. To make assurance doubly sure, it was arranged that funds could be shifted from one district to another, in case there were runs on many member banks in a single district at a given time.

Bank Failures in Recent Years. Many people, firmly convinced that banks could not fail under the Federal Reserve System, were greatly shocked and highly indignant at the large number of bank failures that took place even in good business years, and the almost total collapse of the banking system and unprecedented toll of failures that marked the depression years of 1929–1933. In the prosperous period from 1921 to 1929, inclusive, 995 member banks failed, while 4719 non-member banks met a similar fate. During the four depression years, 1930–33, when member and non-member banks were given a severe test, 2110 member banks and 6796 non-member banks failed.⁴ Let us examine these depression figures more closely. In 1929 there were roughly twice as many non-member as member banks. If member and non-member banks had been equally safe (or equally unsafe), we should have expected the ratio of failures between non-member and member banks to be two to one. Actually the ratio was greater than three to one. This comparison indicates that member banks provided a substantially higher degree of safety for depositors than non-member banks in these depression years.

In 1933, a bank holiday was declared, and all banks in the country were closed. After a few days, the banks which seemed to be sound were licensed to reopen, while the others were required to put themselves in satisfactory condition or eventually be liquidated. Since the beginning of 1934, there have been relatively few bank failures. From 1934 to 1946, inclusive, only 28 member banks and 307 non-member banks were closed on account of financial difficulties.⁵

The failure of non-member banks should not, of course, be charged against the Federal Reserve System. Non-member banks make loans on types of securities, for lengths of time, and for amounts that would not be permitted under the Reserve System, and they persist in following banking practices which would not be tolerated in a member bank. Their reserves are not kept in accordance with the provisions of the Federal Reserve Act, but need comply only with those of state banking laws. In many cases their capitalization is smaller than the minimum required of

⁴ *Statistical Abstract of the United States, 1939*, p. 263.

⁵ *Federal Reserve Bulletin*, September, 1946, p. 1033.

a member bank, and the supervision to which they are subjected is often in no way comparable to that prescribed for member banks. The Federal Reserve System has no control over non-member banks, and has no authority to extend aid to them when they are in distress.

The Causes of Member Bank Failures. In spite of the relatively favorable safety record of member banks in the depression years following 1929, many people feel that altogether too many member banks failed during this period. For 2110 bank failures form a heavy casualty list for a system which aims to provide safety for depositors; and the failure of these member banks tied up deposits running into billions of dollars.

TABLE 37. LOANS AND INVESTMENTS OF ALL MEMBER BANKS,
1921-1929^a

(All figures in millions)

Year (June 30)	Investments	Loans on Securities	Loans on Real Estate	All Other Loans	Total Loans and Investments
1921.....	\$ 6,002	\$ 4,400	\$ 875	\$12,844	\$24,121
1922.....	7,017	4,500	1,100	11,565	24,182
1923.....	7,757	4,950	1,350	12,450	26,507
1924.....	7,963	5,350	1,575	12,279	27,167
1925.....	8,863	6,718	1,875	12,062	29,518
1926.....	9,123	7,321	2,161	12,579	31,184
1927.....	9,818	8,156	2,449	12,333	32,756
1928.....	10,758	9,068	2,624	12,611	35,061
1929.....	10,052	10,095	2,750	12,814	35,711
Percentage increase, 1921-1929.....	67	129	214	0	48

^a Source: *Hearings, S. Res. 71, 71st Congress, 3rd Session*, p. 138, as reported by Lawrence W. Towle in his article, "Time Deposits and Price Stability," in *American Economic Review* for December, 1935, pp. 653-660.

We may well ask how it happened that so many member banks failed. The answer is that the causes were many and various, running all the way from the use of funds to construct a modern replica of a Greek temple as the bank's place of business, to the "borrowing" of large sums by bank officials (sometimes without even the formality of giving a promissory note) and the loss of these funds in playing the stock market. However, the causes of many member bank failures were to be found in changes which took place in the nature of the loans and investments handled by these banks between 1921 and 1929. The figures in Table 37 will help to make these changes clear.

As may be seen from this table, one type of loan seems to have been slighted during this period of rapidly expanding loans and investments. "All other loans," which include all ordinary commercial loans to busi-

ness men based upon short-term, self-liquidating paper arising out of the exchange of commodities, remained virtually constant during the period. It may be that the speeding-up of delivery services made it possible for some business men to reduce their inventory requirements and adopt the policy of so-called hand-to-mouth buying; and perhaps other firms were reluctant to become heavily indebted to commercial banks while the bitter experiences of the 1921-22 depression were still fresh in their minds. Then, too, as the period wore on, it is possible that their own large profits provided many business men with an adequate supply of funds and that "favorable" stock market conditions induced some corporations to obtain, by the sale of additional shares of stock, funds which would ordinarily have been borrowed from the banks. Whatever the specific causes may have been, it is an undeniable fact that, despite a 48 per cent increase in total loans and investments, the member banks were performing their principal function of providing short-term *business* credit no more briskly at the end of the period than at the beginning.

But during this period large additions were made to the gold stocks of the country, bank reserves were plentiful, and the Federal Reserve System, for various reasons, quite consistently followed an "easy money" policy. Since banking is not a profitable business unless bank funds are kept at work, the member banks, in the absence of appeals for ordinary commercial loans, decided to lend in other fields. The identity of these fields may be readily established by reference to Table 37. From 1921 to 1929, member banks increased their loans on real estate by 214 per cent, their loans on stocks and bonds by 129 per cent, and their direct security purchases and other investments by 67 per cent. As a result of these changes, many member banks found themselves by 1929 in a position which raised doubts of their soundness as commercial banks.

The Question of Frozen Assets. We are not suggesting that loans should not be made on real estate and securities, or that banks should not invest in securities. Such loans are necessary and desirable, but we question that commercial banks are the best institutions to handle these kinds of business. When, during a boom period in business, commercial banks get the greater part of their assets tied up in real estate and securities, despite the fact that their depositors have the right to demand their deposits in cash either immediately or on a few days' notice, they are likely to find themselves in trouble if prosperity gives way to depression. For example, the depression years of 1929 to 1933 were marked by falling prices of securities and real estate, and many member banks were unable to recover the funds which they had lent or invested.

Of course, the member banks' "call loans" to brokers, secured by stocks and bonds, were safe for the most part; and loans to other customers, advanced to buy securities, probably led to few losses when these loans were made on adequate "margin." For if the customers failed to pay their

indebtedness, the banks could usually sell the securities for enough to cover the loans. However, some losses were doubtless taken on loans of this type, when bankers had imprudently lent too high a percentage of the inflated values of securities—for the slump in security prices was sudden and drastic. In many cases, the loans on real estate, which had seemed very conservative on the basis of the inflated valuation of the properties, were found to be uncollectible, for the depression prices of many parcels of real estate were less than the amounts that had been lent on them. Similarly, the banks' directly owned securities and other investments declined rapidly in value, and the efforts of distressed banks to liquidate these investments speeded the decline. Consequently, when depositors began to demand their deposits, member banks found themselves in serious difficulties.

But were not the Reserve banks expected, in such troublous times, to come to the rescue of their members? It was, indeed, a time when aid was needed, but the member banks were often not in a position to claim and receive aid. For membership in the Federal Reserve System was never an absolute guaranty of safety for a bank. The statement that the System would not allow member banks to fail meant merely that the Reserve banks would place funds, in practically unlimited amounts, at the disposal of member banks which had not impaired their borrowing power through dishonest or imprudent banking practices, and which had on hand a supply of collateral eligible for rediscounting. The Reserve banks could advance funds to members (1) by rediscounting eligible commercial paper, and (2) by discounting promissory notes of the member banks themselves, when secured by government bonds.

However, eligible commercial paper and government bonds are likely to be scarce in the case of banks that have lent extensively on other types of collateral. The Reserve banks could not legally rediscount paper based on stocks and bonds, or real estate mortgages; nor could they lend on the member banks' direct investments, unless these took the form of government bonds. So far as we know, no member bank failed during the depression because the Reserve banks were short of funds, but many failed because their assets were such that the Reserve banks could not legally aid them. And it developed that some member banks were signing their own death warrants when they overexpanded certain types of loans and investments from 1921 to 1929, though at the time they seemed merely to be sharing in what many people regarded as a new and permanent era of prosperity.

The Attitude of the Public. It would be both unfair and misleading to say that every member bank that failed richly deserved to do so. The banks that took improperly secured mortgages, and unseasoned, high-yield, narrow-market bonds, or that made loans on securities which were inadequately margined, inadequately diversified, or which otherwise failed

to measure up to sound banking standards, were responsible for their own fate.⁶ Moreover, the conditions were even less satisfactory in non-member banks. However, some banks failed, or were at least seriously embarrassed, because of hysteria on the part of the banking public, and not because they were unsafe. Some banks that had been reasonably prudent were forced to close their doors because unreasoning fear on the part of their depositors led them to demand immediate cash for their deposits. And in some cases these demands could not be met because the banks had, in all good faith, accepted commercial paper which proved later to be worthless, since the firms that issued it had been forced into bankruptcy by the depression. It would seem, then, that a banking system is not much stronger than its weakest bank. Had not the failure of certain large banks disclosed the existence of unsound conditions in the banking world, the depositors of other banks might not have questioned the safety of their deposits, and thus runs on essentially sound banks might have been avoided.

Recent Legislative Changes Affecting Safety: Separation of Commercial and Investment Banking. In view of the general criticism of our commercial banking system in recent years, it was inevitable that legislative steps should be taken to remedy the situation. Let us examine this legislation, considering first the measures taken to separate investment and commercial banking.

The Banking Act of 1933 provided that member banks must give up their security affiliates within one year. These affiliates were companies organized and controlled by commercial banks for the purpose of engaging in investment banking operations. These operations, which had proved very profitable prior to 1929, could not legally be performed directly by member banks. Though the relations of commercial banks with their security affiliates were often entirely wholesome and aboveboard, there were cases in which the reverse was true. The affiliates sometimes unloaded doubtful securities on the commercial banks—securities which the banks would not have purchased from anyone else—and the banks sometimes made loans to their affiliates in amounts and on securities which would not have been considered by the directors of independent banks. Hence, the separation of the two types of banking was probably necessary, if we are to have a sound commercial banking system. It was also provided that investment banks shall not be allowed to hold demand deposits, and that no officer or director of a member bank shall be an officer or director of an investment banking firm.

We must also emphasize at this point the fact that the Board of Governors of the System has authority to regulate the percentage of member

⁶So said Winthrop W. Aldrich, noted New York banker, in suggesting ways of improving the banking system, before the Sub-Committee of the United States Senate Committee on Banking and Currency at Washington, November 29, 1933.

banks' capital and surplus which may be tied up in security loans, and may deny rediscounting facilities to member banks which misbehave in this respect. Formerly, the Reserve banks were required to rediscount for member banks whenever eligible paper was presented, and the member banks could use the funds for speculative or other purposes. Member banks are now prohibited from making call loans "for others"—the others being individuals, corporations, or foreign groups who wish their funds to be used temporarily for speculative purposes with the privilege of withdrawing them at any time. Member banks may not underwrite securities except those of states and municipalities, may deal in securities only as agents of their customers, and may not have more than 10 per cent of their own capital and surplus invested in the securities of any one obligor.

Loans to Officers. One of the evils of our banking system in the past was borrowing by executive officers from their own banks on collateral of doubtful value. The Act of 1933 provided that officers of member banks may not borrow from their own banks and must report any personal loans from other banks. However, according to the Act of 1935, banks may lend to officers of member banks in amounts up to \$2500, provided the loans have received the prior approval of a majority of the directors of the lending banks.

These regulations are probably desirable and, if they have the effect of keeping member banks within their legitimate field of commercial banking, may add to the safety of their depositors. However, it must be remembered that the effect of such legislation, with respect to both elasticity and safety, may be offset in part by the non-member banks, which are not controlled by federal legislation. Moreover, there may be other ways to render the regulations ineffective. For example, prior to 1933, a business man who wished to play the stock market might leave his own funds in his business as capital and speculate with borrowed funds. Now, however, he might speculate with his own funds and borrow from a commercial bank to finance the short-time needs of his business. In such cases, the bank's safety may be increased, but speculation is not controlled.

Changes in Member Bank Borrowing. The Banking Acts of 1933 and 1935 also changed the terms on which member banks may borrow from Reserve banks, and provided a system of federal deposit insurance for bank depositors. During the depression, depositors were sometimes unable to get cash on demand, because of the inability of the banks to turn their assets into cash promptly. The obvious remedy was to make all kinds of commercial paper eligible for rediscount at the Federal Reserve banks. The new law did not do this, but it did something almost as unwise, for it provided that member banks may borrow from Reserve banks on their own promissory notes, secured in any way satisfactory to the Reserve banks. These loans may be made for four months or less at a rate of interest only one-half of one per cent higher than the highest rediscount rate in

effect at the Reserve banks. This means that, while only eligible paper may be rediscounted, member banks may, in effect, turn their ineligible paper and other assets into cash at Reserve banks and may thus be protected from the logical results of their unsound policies in lending on real estate and securities, and investing directly in securities. This policy may give greater safety to depositors, but it is extremely doubtful that it will raise the standards of commercial banking.

Loans on Real Estate. The Act of 1935 also lowered the restrictions on real estate loans by member banks. These loans could formerly be made up to a total equal to 25 per cent of a bank's unimpaired capital and surplus, or 50 per cent of its savings deposits, whichever was greater; whereas the new limit is 100 per cent of capital and surplus, or 60 per cent of time and savings deposits, whichever is greater. The individual loans could formerly be made only up to 50 per cent of the value of the real estate, and for five years or less. Now they may be made for ten years and up to 60 per cent of the appraisal value, provided 40 per cent of the principal of the loan is paid in installments over the ten-year period. Moreover, such loans are renewable.

These new provisions relating to borrowing by member banks from Reserve banks and to real estate loans appear to us to be objectionable, though they are thoroughly approved by some writers on banking. These writers hold that investments and loans on real estate and securities have become an increasingly important part of the commercial banks' business in recent years and that, under the circumstances, it is silly to deny the banks access to the reserves of the System merely because they cannot supply the prescribed eligible commercial paper. If depositors are to be safe, the banks must be able to convert other assets into cash at the Reserve banks in an emergency. This is comparable to saying that commercial bankers must be allowed to wander into fields where they do not belong, but that the Reserve System must protect them against getting into trouble during their wanderings and thus causing loss to others. If the premise is granted, the conclusion seems to follow; but we suggest that it would be better to keep commercial banks strictly within the field of commercial banking, and thus prevent the mistakes which are largely responsible for the losses suffered by depositors. If commercial bankers will only run their businesses as they should, they may obtain adequate assistance from the Federal Reserve System in time of need, under the old provisions for rediscounting.

The Plan for Deposit Insurance. But if banks fail in spite of all that is done for them, the Act of 1935 has yet another safeguard for the depositors—for the Act provides for federal insurance of bank deposits through the Federal Deposit Insurance Corporation (hereafter referred to as the F.D.I.C.), whose original capital was furnished by the government and the Federal Reserve banks. All banks which were insured under

a temporary plan provided by the Act of 1933 may continue to be insured. Member banks are required, and non-member banks permitted, to take out deposit insurance. New national banks and state member banks must qualify for insurance before receiving their charters, and non-member banks not already insured may be granted insurance after passing an examination. The F.D.I.C. may deny insurance to any bank it considers unsound or unnecessary, and banks may withdraw from the insurance system at will, or may be excluded for violation of rules. By the middle of 1946, the F.D.I.C. was insuring the deposits of 13,330 commercial banks, or 95 per cent of the total.⁷ The insured banks had more than 92 million deposit accounts, and total deposits (including governmental and inter-bank deposits) of over \$140,000,000,000.

The F.D.I.C. provides insurance for each depositor of an insured bank up to \$5000. Persons having larger funds may secure full coverage by depositing with several banks. It was estimated in late 1945 that 96.4 per cent of all depositors' accounts *by number* were fully covered by insurance, though only 46 per cent of all deposits *by value* were similarly protected.⁸ The F.D.I.C. uses two procedures to fulfill its responsibility in protecting bank depositors from loss. It pays depositors up to the \$5000 maximum in insured banks placed in receivership, and it makes advances to facilitate mergers of weak insured banks with strong institutions. The first method is more commonly used.

Evaluation of Deposit Insurance. Deposit insurance may be criticized from several angles. From a technical point of view, it may be questioned whether it is wise to provide insurance at a flat premium for all banks without regard to the risk involved. In other types of insurance, the principle employed is to vary premiums as between classes or individuals, according to the degrees of risk represented. Moreover, a flat premium rate based on total deposits seems to discriminate in favor of small banks; for a small bank may secure practically complete coverage of its deposits by paying the flat premium on total deposits, while a large bank with many deposits over \$5000 may have only a fraction of its total deposits covered by insurance although it pays a premium based on total deposits. This discrimination is not necessarily undesirable.

Furthermore, there is some doubt that bank deposits are genuinely insurable. Our experience in the post-1929 depression showed that a considerable number of banks may get into trouble at one time, and if this should happen in the future the F.D.I.C. might have serious financial difficulties. It is argued that a risk, to be really insurable, must be one which will not result unfavorably for many or most of the insured at any given time. Fire insurance companies would hesitate to grant insurance if there were any likelihood that all or most of the insured properties

⁷ *Federal Reserve Bulletin*, September, 1946, p. 1034.

⁸ *Annual Report of the Federal Deposit Insurance Corporation*, 1945, p. 63.

would be destroyed by fire at any one time. A popular answer to this objection is that depositors will no longer take part in runs on banks, since they know that the government stands behind the deposits, but this answer is not wholly convincing. In spite of the protection provided by insurance, the deposits in a bank that fails will not be available for depositors the next day, or even the next week. Some little time will necessarily elapse before all depositors will be paid. Since this is true, the desire to have one's money now rather than later may lead to bank runs as in the past, and cause the F.D.I.C. real embarrassment. If necessary, the government would doubtless provide the corporation with additional funds to prevent its failure; but if the need for such governmental aid should develop, the "insurance" of deposits, as such, would appear to be unsound. It is entirely possible that bank deposits could be handled through the application of the accepted principles of insurance, by carefully selecting the banks where deposits are to be insured and charging premiums adapted to the risks, but many people have had doubts about our present system of insurance. Again, deposit insurance—especially insurance on a flat-rate basis—has been objected to on the ground that it may encourage recklessness on the part of some bankers since they know that, because of the insurance, their actions will not cause loss to their depositors.

Quite apart from these criticisms, it is appropriate to ask whether deposit insurance of some kind is or is not a necessary and desirable adjunct of a sound system of commercial banking. Our answer is in the negative, and the basis of this answer is a familiar one. If we were to assume that commercial bankers through unsound banking practices would continue, in the future as in the past, to get into difficulties which would result in serious loss to their depositors, then we should be inclined to endorse federal deposit insurance. But we object to this assumption, since we contend that the depositors in a soundly conducted system of commercial banking would be adequately protected, in general, without recourse to government assistance in this form. Hence, we cannot regard deposit insurance as the best possible method of safeguarding the interests of depositors.

On the other hand, many arguments have been advanced in favor of deposit insurance. It is said to be costless to the banks themselves. The argument is that the banks lose heavily whenever business men and other depositors lose their confidence in them, as they do after a period of bank failures, so that to buy insurance is cheaper than not to have it. It is believed that deposit insurance will stimulate the growth of savings deposits and prevent hoarding, and will aid in protecting sound banks against the runs which are common when weak banks fail. Finally, attention is frequently called to the helplessness of the depositors in the absence of insurance; to the inadequacy of the protection which they receive

through governmental supervision and examination of banks; to the public character of banking; and to its great importance in our national economic life, which makes it imperative to avoid bank panics if it is at all possible to do so.

The Results of Deposit Insurance. The fears that have been expressed about our system of deposit insurance have not been realized up to the present time, and the record of the F.D.I.C. has been favorable. In twelve years of operation, the F.D.I.C. paid out or set aside for payment some \$261,717,000 in connection with the failure or rehabilitation of 398 insolvent or hazardous banks. The F.D.I.C. estimates that only \$31,800,000 out of the \$261,717,000, or a little over 12 per cent, should be considered a total loss. The total expenditures of the corporation, including these final losses, amounted to \$73,400,000 in this period. The premiums paid by the insured banks brought in \$563,600,000 and the corporation received \$149,700,000 as investment and other income; hence the total income exceeded total expenses by \$639,900,000 over this period, and the surplus of the F.D.I.C. was increased by this amount.⁹

It also appears that the F.D.I.C. may be a strong force making for better banking standards in our system. It has the right to examine all insured banks, or to review the examinations of these banks. It actually examines all insured banks which do not belong to the Federal Reserve System, but it leaves the examination of national banks to the Comptroller of the Currency, and that of state member banks to the Board of Governors of the Federal Reserve System. It "cites" insured banks for violations of laws and regulations and for unsafe and unsound practices, and can terminate their insurance if they do not improve their behavior. Non-insured banks which desire insurance as non-member banks, insured non-member banks which wish to retire or reduce their capital or to establish or relocate branches, and insured banks of any kind which seek to assume the deposits of, or merge or consolidate with, non-insured banks, must obtain permission from the F.D.I.C. The F.D.I.C. has power to regulate the rate of interest paid by insured banks on time deposits, and banks are no longer permitted to pay interest on demand deposits. Finally, the operation of deposit insurance probably deters would-be bankers from starting unsound and unnecessary banks, since such banks may be refused deposit insurance and few people will care to entrust their deposits to banks that do not carry insurance of this kind.

THE NEED FOR FURTHER CHANGES

With safety for depositors already achieved, the chief problem of commercial banking in the United States is adequate control over the expansion and contraction of bank credit. Some students of banking problems

⁹ *Ibid.*, pp. 16, 32.

question that such control is possible so long as we have a separate system of commercial banking for each state, side by side with the Federal Reserve System for member banks all over the country. With forty-eight state banking systems, each operating under its own banking laws, and with the state-chartered banks at least partly beyond the reach of federal control, effective regulation of commercial banking as a whole is most difficult of achievement.

Compulsory Membership in the Federal Reserve System. From this point of view, the first step in genuine reform is to require every commercial bank in the United States to join the Federal Reserve System. This requirement would bring all commercial banks under one general plan, with the result that our national banking laws and regulations relating to elasticity, credit control, the relations of commercial and investment banking, and safety, would function much more effectively than in the past. It is important that this measure be enforced without any lowering of requirements, especially with regard to minimum capitalization for member banks. Indeed, it would probably be well to raise the minimum capitalization to a figure substantially above the present requirement. It may be objected that some state banks could not make the changes necessary to meet the requirements for membership in the Federal Reserve System. This is probably true; but the objection may be answered by saying that any bank which, given due notice, fails to measure up to the membership requirements is not an essential part of our commercial banking system and may well be eliminated.

Branch Banking. Many economists feel that, even if all commercial banks were members of the Federal Reserve System, we could not adequately control bank credit so long as we have some 14,000 independent banks in the country. They believe our commercial banking problems would be simplified if we adopted a nation-wide system of branch banking, such as that of Canada or England. In England, thirteen large joint-stock banks have some 9750 branches, while in Canada there are ten large banks with about 2850 branches.¹⁰ Under such a system, the United States might have (say) ten or twenty large banks, each with hundreds of branches, and our present small independent banks would be eliminated. At present, branch banking is permitted only to a limited extent in this country. According to a recent report, we have 1223 banks that have branches, and the branches number 4168, most of them being in the same city or county as the parent bank.¹¹

In support of branch banking, it is urged that a large bank with many branches could have a widespread industrial and geographical diversification of assets and liabilities which would prevent its being forced into

¹⁰ R. G. Thomas, *Our Modern Banking and Monetary System*, New York, Prentice-Hall, Inc., 1942, pp. 342, 343.

¹¹ *Annual Report of the Federal Deposit Insurance Corporation*, 1945, p. 98.

bankruptcy by local factors affecting certain types of loans, while its size would make it possible to bear heavy losses without becoming insolvent. Many of our recent bank failures have been those of banks with very small capital which have been unable to diversify their loans properly, and have become insolvent when their principal form of loans turned out badly. Under branch banking, it is claimed, such loans could safely be made by the branches, because these loans would be combined with many other types of loans and the parent institutions would be so large that whatever losses occurred could be absorbed without serious difficulty.

A second reason for expecting a reduction in bank failures is that branch banking would probably provide what are now our smaller banks with a superior type of bank management. The great size of the parent banks would make it possible to employ the best of management, and all branches would benefit by this high-class managerial ability. In addition, it might be possible to require bankers to be carefully and completely trained before they were placed in positions of responsibility.

The claims for branch banking advanced thus far have dealt chiefly with safety, and the problem of safety has already been largely solved in the United States. However, it would be desirable to have a system in which safety results from the *inherent soundness* of the commercial banks. It seems improbable that branch banking would bring a significant change in the *ability* of money and credit to expand and contract. However, the *control* of elasticity might be somewhat more effective than under our present system. It might be easier to induce a few large banks to cooperate in the control of credit than to get cooperation from thousands of more or less independent banks; and, furthermore, the enforcement of banking laws and regulations might be simplified under branch banking. Of course, the problem of proper examination of the banks and their branches would still be a formidable one.

On the other hand, it is possible that the higher type of management under branch banking might be offset to some extent by the heavy cost of the central organization, the red tape involved in its operation, delays in making decisions, and an extensive division of responsibility. A system of branch banking might retard the economic development of the country. Small depositors and borrowers might be neglected because of the greater profitability of large accounts and the inability of small borrowers to furnish collateral security acceptable under the rules of the parent bank. Branch banks might find it difficult to adapt themselves to changing economic conditions. Large institutions often depend extensively upon formal rules and regulations in operating their business, and branch banking might result in a relative fixity of policy which would lessen the ability of the banking system to adapt itself to the varying needs of different sections of the country.

Finally, it is sometimes contended that branch banking might lead to

a concentration of power which we would find intolerable. Those in control of the few great banks might come into control of industry, and dominate fiscal and Federal Reserve policies as well. Since the branch banks would be operated for profit, such a financial monopoly might adjust the issuance of commercial credit to the needs of the country even less successfully than our banking system has done in the past, and conceivably create a situation in which the banks would be safe only because of their ultimate reliance upon the credit of the government.

In attempting to reach a decision on the desirability of branch banking, the crux of the whole matter seems to be whether the management of banking institutions would automatically be better under branch banking than under our present system of unit banking. Unless bank management improved, merely the large size of banks would be no positive guaranty of safety. Large banks with many branches *could* diversify their loans and investments to a greater extent than ordinary independent banks, but there is hardly certainty that they *would actually and automatically do so*. Countries with branch banking have had failures of banks with hundreds of branches, though in general the banking record of such countries in the great depression after 1929 was excellent. Of course, parent banks in America might be so large that the government could not afford to let them fail; but this type of safety would represent no advance over the present situation, for we have already decided that we cannot leave our independent banks free to fail.

We can scarcely deny that the excellent results obtained in other countries with branch banking systems have been largely due to superior bank management, but we are uncertain as to whether the better management has been the result of branch banking *per se* or whether it has resulted from the development, through the years, of an established tradition of sound banking plus the operation of all banks under a unified banking system and uniform laws. In Canada, for example, all commercial banks operate under a set of laws applying to the whole Dominion. Canadian commercial banks do not lend on real estate or engage in handling trust funds. They may not hold shares of bank stock, or make loans with such stocks as security. Their investments consist almost wholly of high-grade bonds or other securities which are quickly convertible into cash. Nor do they follow the common American practice of renewing a given short-term loan over and over again, until it amounts virtually to a fixed capital investment. Finally, the managers of Canadian banks are generally steeped in the principles of sound commercial banking, and have often risen from the ranks on the basis of merit alone. Such conditions might result in sound commercial banking in any country, whether or not it had a system of branch banking.

According to the supporters of branch banking, such superior management, practices, and policies *result from having branch banking*. If this

conclusion is valid, it follows that the United States should proceed to develop a complete system of branch banking as rapidly and enthusiastically as possible.

The Limitation of Commercial Banking. A vital need of banking in this country is an effective means for restricting commercial banks to the business of commercial banking. We believe that commercial banks should be forbidden to lend on real estate, for this is hardly a proper function of commercial banking. Loans on stocks and bonds should be permitted but sparingly, and then only with large margins of safety. The security investments of commercial banks should be limited to the highest and most liquid types of securities. The banks' power to make *fixed capital* loans to business men, by repeatedly renewing short-term *commercial* loans, should also be restricted sharply. Many of these types of loans and investments, which should not be made by strictly commercial banks, are appropriate for savings banks or for the savings departments of other banks; but, unless our commercial banks can learn to run their savings departments without becoming confused as to functions, it would seem desirable for commercial and savings banks to be entirely separate institutions. This comment is applicable also to trust departments now operated by commercial banks.

Under conditions such as these, there would probably be little need for deposit insurance, or for member banks to borrow from Reserve banks on the basis of so many types of security. We should no longer be troubled by an extension of deposit credit to many times the amount of money available for the conversion of deposits into cash. If the deposits of commercial banks were almost entirely the result of bringing cash items to the banks or discounting eligible commercial paper, there would be no need to have on hand, in the form of money, 100 per cent of the deposits which might have to be paid off at any time. That is, if the banks' deposits were backed almost wholly by liquid investments and by commercial paper eligible for rediscount, the banks could always secure cash at the Federal Reserve banks in quantities sufficient to stave off any run by depositors; and we should not need to liberalize the conditions for rediscounting or provide deposit insurance. The deposits of a *sound* commercial banking system are safe without outside guaranty.

The Development of Better Bankers. Perhaps our greatest need in American commercial banking is better bankers, rather than better banking laws and regulations. Many an authority on banking, wearied by the adoption of countless banking laws which appear to bring little improvement, has suggested that our commercial banking system has been overburdened with legislation but insufficiently governed by sound credit policies and practices on the part of bankers. The American attitude toward banking problems has been that, if we could pass large numbers of good laws, we should get good banking; but actual experience gives

ample grounds for suspecting that it is difficult, if not impossible, to make good bankers by legislation. We have tried, by laws and regulations, to prevent banking practices which bankers in other countries, under the influence of tradition and custom, would regard as unthinkable even in the absence of laws and regulations.

No body of banking laws can be so nearly perfect that bankers cannot, if they wish, find loopholes for employing methods which may eventually have serious consequences to their own businesses and to other members of society. If banking is to remain in private hands, there is no adequate substitute for the sound judgment of bank officers as a safeguard against the improper use of credit; and it seems clear from past experience that an improvement in banking personnel must be an integral part of any advance in commercial banking. There is need for an understanding of the relation of commercial credit to the rest of our economic structure, and an appreciation of the fact that a loan may be sound and profitable in and of itself and yet, in conjunction with thousands of similar loans by other banks, disastrous for the system as a whole. It was once the custom in a certain European country for the head of a wrecked bank to take his own life, instead of hiring a battery of lawyers to defend him or departing posthaste for foreign and sunnier climes. Without going so far as to advocate such harsh measures, we are firmly convinced that our bankers must be made to recognize their obligations—that they must be brought to regard banking as a kind of public trust instead of, or at least as well as, a business conducted for private profit.

1. What conditions must be fulfilled if elasticity of money and commercial credit is to be attained?
2. "The function of money and credit is to facilitate, but not to determine the nature and content of, economic activity." Explain.
3. How was the Federal Reserve System, under the powers originally granted it, expected to control the expansion and contraction of credit?
4. Were the powers vested in the System adequate for this purpose?
5. "Open-market operations and changes in rediscount rates are really only different phases of a single method of credit control." Explain.
6. How have the powers of the Federal Reserve System for controlling the expansion of commercial credit been strengthened in recent years?
7. Explain the importance of the Board of Governors' power to alter the reserves required behind the demand and time deposits of member banks.
8. "The new powers of the Federal Reserve System for controlling the expansion of credit have not received a fair trial up to the present time." Explain.
9. Give some idea of the number of failures of member and non-member banks from 1921 to 1933, and from 1934 to 1945.
10. What was the leading cause of member bank failures in the depression years 1929-1933?

11. Recent banking legislation is said to have provided for the separation of commercial and investment banking. What is the meaning of this statement?
12. How did the Banking Act of 1935 change the terms on which member banks may borrow from Federal Reserve banks? Explain.
13. Explain the federal plan to insure the deposits of commercial banks under the Banking Act of 1935.
14. What problems arise in connection with a plan of deposit insurance such as we now have in the United States? Explain.
15. Is deposit insurance a necessary and desirable feature of a sound commercial banking system? Why or why not?
16. What other changes affecting the safety of depositors were included in recent banking laws? Explain.
17. Why do banking laws and regulations for credit control affect also the safety of depositors?
18. Should all commercial banks be required to become members of the Federal Reserve System? Explain.
19. Present the arguments for and against branch banking as a solution of our banking problems in the United States.
20. "A national system of branch banking should be adopted in the United States." Discuss.
21. Should we require that commercial banks limit themselves strictly to commercial banking? Explain.
22. "Even the best of banking legislation will not necessarily give us a sound system of commercial banking." What more is needed, and why?

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Investment Banking

AN INCREASE IN POPULATION USUALLY MEANS AN INCREASE IN ECONOMIC machinery to supply the newcomers with commodities and services. An increase in individual purchasing power, permitting the use, by those in the lower income groups, of comforts or minor luxuries which have been denied them in the past, likewise leads to an expansion in productive facilities. Finally, every new invention of a practical nature—such as the automobile, air conditioning, or television—means the construction of buildings and equipment that will promptly place the new good in the hands of all who are able and willing to buy. Hence, in all economically progressive countries there is a continuing demand for fresh supplies of fixed capital with which to increase the output of economic goods.

THE NATURE OF INVESTMENT BANKING

Funds to be expended for fixed capital may be, and sometimes are, provided by the business enterprisers who use them; and, again, they may be procured by enterprisers directly from private individuals who are looking for investments which they expect to pay them a satisfactory return from year to year. But financing of this kind—directly from saver to enterpriser—is likely to be on a rather small scale, and to relate to the individual proprietorship or partnership form of business organization. Also, in instances of direct borrowing the enterpriser is usually personally acquainted with those who entrust their funds to him.

Investment Bankers. It is much more common, however, to handle loans for fixed capital through banking houses that make a specialty of dispensing credit for permanent investments. Because of the need for agencies of this kind in a rapidly growing industrial society, there have developed in the United States a number of investment banking concerns, whose job is to gather together the savings of many individuals and place them at the disposal of the few who can use them to advantage in the conduct of business ventures.

The process of collecting savings is carried on indirectly in most cases. That is to say, investment bankers do not as a rule come into direct contact with those whose funds they invest, unless the latter happen to be persons of great wealth whose accumulations are sufficiently extensive to warrant

individual attention. For the most part, the established investment banking houses secure their funds by floating issues of stocks and bonds of concerns that are about to be launched, or of established concerns that can use to advantage additional quantities of fixed capital.

The "Selection" of Investments. The process of financing a large business undertaking is far from simple. For convenience in discussion, the process is often divided into three parts—selection, underwriting, and distribution. If a group of business men should need to secure many millions of dollars' worth of capital for a new industrial project—say, the manufacture of plastics or television receiving sets—or should they wish to expand the plant or equipment of a going concern, they would be likely to open negotiations with a great investment banking house, such as J. P. Morgan and Company, or Kuhn, Loeb and Company, and request that this financial concern undertake to float an issue of stock or bonds, or perhaps both. If the banking house had no intimate knowledge of the project in question, it would undoubtedly make a careful investigation of all pertinent facts before agreeing to finance the operation. Of prime importance is the salability of the new securities, for investment bankers are seldom interested in buying stocks and bonds which they cannot readily dispose of. But of almost equal importance is the safety of the project under consideration; for an investment banking house is known by the securities it sells, and its reputation is safe only as long as its customers are pleased with their purchases. Hence there is need to ascertain that the business to be financed is entirely sound, and that its securities represent a safe as well as profitable investment.

"Underwriting" and "Distribution" of Securities. If, with all necessary information at hand, the investment banking house decides to undertake the task of providing the desired funds, it guarantees (or "underwrites") the sale of the necessary stocks or bonds, or both, within a specified time. The investment banker buys these securities from the company at a figure lower than the anticipated market price, so that he may reasonably expect to make a profit from their sale. Now comes the task of disposing of the securities. To this end, the investment house usually proceeds to form an "underwriting syndicate," a temporary association made up of a number of other investment houses that are given an opportunity to join in the sale of the securities in question.

Each of the several underwriting concerns guarantees that certain amounts of the securities will actually be sold. The original banking house now offers these securities for sale to the public at, of course, a higher price than was paid for them. If the entire issue is sold without difficulty, each of the participating concerns is rewarded on the basis of the quantity that it individually underwrote, or guaranteed. If, on the other hand, some of the securities remain unsold after a specified time, they are divided among the underwriting houses in proportion to their guaranties, and

are sold by each to investors on terms as advantageous as can be secured.

Underwriting, it will be seen, involves the principle of insurance, and is one of the many devices used in the business world for "spreading the risk." An investment house would usually rather have a one-twelfth interest in each of a dozen good securities, than complete responsibility in a single stock or bond that has been issued in huge quantities.

Investment bankers are sometimes called "security merchants," the great banking houses that float issues of stocks and bonds being known as wholesalers and the smaller underwriting houses as retailers. The commercial banks also play an important part in the business of providing investment credit, since they lend extensively to investment banking houses, accepting as security for the payment of the loans the stocks or bonds that the underwriters have taken over from the Morgans, the Kuhn, Loeb's, and other large issuing concerns.

Our organized security exchanges, such as the New York Stock Exchange and the New York Curb Exchange, are another agency in the distribution of securities. In the course of time, most important security issues are listed on an exchange and the exchange becomes a market place in which the securities are bought and sold. The promoters of an issue sometimes manipulate the market in such a way as to cause a gradual rise in the price. This is done by offering to buy the security at progressively higher prices day by day. Thus, a stock that is being manipulated by a "pool" of bankers who are interested in disposing of large numbers of shares might sell today at \$30 a share, tomorrow at \$30.25, the next day at \$30.50, and so on. Certainly no shares will be sold at less than the price offered by the pool, since holders of shares will naturally sell, if at all, at the highest price obtainable. As the price keeps rising, the general public, noting the steady increase and scenting big future profits, is drawn into the market and this new demand for shares aids materially in distributing the issue. This is one of the questionable practices restricted by the Securities Exchange Act of 1934, which we shall examine later in the chapter.

Though not all of the securities issued through investment bankers are listed on the organized exchanges, the largest, most important issues are eventually listed. At first, many of these stocks and bonds get largely into the hands of buyers who are speculatively inclined, and who are likely to sell out in a few weeks or months and pocket the gain to be realized through whatever price increase has taken place since the date of purchase. But once a stock or bond has become established as a dependable security paying a satisfactory return, it comes more and more extensively into the possession of investors, who buy primarily for the purpose of getting a steady income from their purchases.

Reinvested Earnings. Another important means of accumulating funds for the purchase of fixed capital is the reinvestment of part of the earnings of business concerns. It is now a very common practice for great corpora-

tions not to distribute to their stockholders in the form of cash dividends as much as has been earned in a given period, say a year. Not only does the successful business enterprise usually establish a surplus fund from which to meet deficits and pay dividends in unprofitable years, but a part of the profits of good years is often laid aside with the deliberate intention of using it for expanding the business—that is, for providing fixed capital. The growth of the Ford Motor Car Company from an original investment of only \$28,000 to one measured in hundreds of millions was accomplished wholly through the device of reinvested earnings, no new capital funds having been added to the business except those withheld year by year from the tremendous earnings of this company.

While additions to new capital from reinvested earnings are not so large as the additions made through the sale of stocks and bonds, they nevertheless form a very significant part of the capital accumulations of this country. Of course, earnings that are allocated to surplus add to the value of the business, and in the case of corporations are reflected in the enhanced value of the stock outstanding, provided no additional shares are issued. But boards of directors frequently issue stock dividends in lieu of cash dividends, and this action tends to hold down the selling price of the shares. On the other hand, it puts new shares in the hands of the old stockholders, who if they wish may convert their new holdings into cash by selling them to others. But whether the new shares are held or sold, the new capital funds which they represent are in the possession of the corporation. With the use of these funds, expansion may proceed without the delay and expense that might be entailed had the corporation attempted to secure these funds through the sale of stocks and bonds.

Agencies for the Collection of Savings. By whom are industrial stocks and bonds purchased? Ultimately, of course, by the general public or by that portion of the public that earns more than it spends for consumption purposes. But in many cases the savers of income invest it not directly, but through an intermediate agency of one type or another. Commercial banks, savings banks, insurance companies, and endowed institutions of many kinds have funds to invest from time to time. Since these funds are not likely to be called for soon, or to any appreciable extent, they are largely available for long-term investment, provided the investment is safe.

Because many of these savings belong to persons of rather limited financial resources, there is special need for security; and certain institutions, such as insurance companies and savings banks, are restricted in the uses to which their available funds may be put. Though the individual investment in insurance or in a savings account is frequently small, the total accumulation of this kind is great. Total time deposits in this country had reached, by September, 1947, the imposing total of 56 billion dollars, of which 21 billion were funds entrusted to mutual savings banks and the Postal Savings System.

PROBLEMS OF INVESTMENT BANKING

Many problems of individual and social significance have arisen in connection with investment banking. One is the necessity of providing the greatest possible degree of safety for purchasers of the securities issued by investment banks. Investors must be protected from securities that are fraudulent in character, and from security salesmen who grossly overstate the possibilities of the stocks and bonds they offer to the public.

Another important problem is to insure that investment banking shall be carried on efficiently and in a manner consistent with the public welfare. More specifically, this means that investment credit must not be so extended at certain times and so restricted at others that its issuance becomes an important cumulative factor in causing business instability. It means, also, that this credit must be distributed among the industries seeking it, so as to coordinate the creation of new productive facilities with the desires of consumers. Finally, it is important that investment banks, in performing their function, shall not be permitted to get a strangle hold on industry by threatening to withhold needed credit if such control should be denied them.

Safety for Investors. Those who have securities to sell are frequently more optimistic as to the future of their stocks and bonds than the situation warrants. Consequently, many of the securities sold to the public have turned out to be worthless. This failure of securities to live up to the representations of the sellers is by no means a new economic phenomenon. Indeed, it is as old as the corporation itself. The fleecing of the public through the sale of worthless securities has led to the adoption, by forty-three states and the District of Columbia, of laws regulating the sale of securities and, in some cases, providing for the recovery of losses incurred by those to whom they have been sold in violation of law.

But the widespread purchase of stocks and bonds in the boom period preceding 1929, followed by the loss of an estimated 25 billion dollars by the American purchasers of valueless securities, brought the question of investment frauds to a head. The result was the passage of two federal measures, the federal Securities Act and the federal Securities Exchange Act.

The Federal Securities Act. The federal Securities Act was passed in 1933. Its purpose was "to provide full and fair disclosure of the character of securities sold in interstate and foreign commerce and through the mails, and to prevent frauds in the sale thereof."

Without intending to interfere in any way with the enforcement of state legislation dealing with the sale of securities, this federal law was designed to insure that the buyer of stocks and bonds should be fully informed as to the standing of the company in which he was investing. The issuer of a security was required to file with the Federal Trade Commission up to

September 1, 1934, and thereafter with the Securities and Exchange Commission (a commission of five members appointed by the President of the United States) a registration statement which contained all information about the security which an investor needed to know. Until this statement was filed, the security could not be sold or offered for sale through any agency of transportation or communication in interstate commerce or through the mails. Once the statement was filed, the seller had to provide every buyer with a prospectus, which in reality was a summary of the information contained in the registration statement.

The Act also provided for the civil liability of security issuers to investors suffering losses, if the registration statement or prospectus contained false information or omitted material facts. All who shared in misleading the investors, including the issuing corporation, the original investment bank marketing the security, the underwriters, and even accountants and other experts, were held liable. As originally passed, the liability provisions were very severe. Purchasers of securities could recover in court their full losses on the securities, even though the false information or omissions in the registration statement or prospectus were not the cause of the loss, or were only a partial cause. The Act permitted recovery of losses by anyone buying a security, whether or not he ever saw or relied upon the statement containing the false information or omission. Each member of an underwriting syndicate was held liable to all purchasers of a security, including the customers of other members of the syndicate as well as its own customers, and suit could be brought for the recovery of losses at any time within ten years after the public offering of the security.

Appraisal of the Federal Securities Act. The federal Securities Act aroused a good deal of protest. There was general sympathy with the aims and purposes of the Act, but it was felt that the law was unduly severe in prescribing liability for security issuers and sellers. It was held that the Act assumed guilt on the part of all connected with unfortunate security issues unless they could prove their innocence, and that it would foster litigation, false claims, and nuisance suits. It was pointed out that not all information connected with a business could be furnished to the Commission and that a fact, originally omitted from the registration statement as unimportant, might later appear to be material and relevant. Some critics even expressed a fear that the investment banking business might be practically exterminated because of the great dangers and liabilities that would have to be borne by corporations, investment bankers, and underwriters.

As a result of these protests, the federal Securities Exchange Act of 1934 amended the federal Securities Act in several respects. The purchasers of new securities may now recover full losses, without regard to causation, unless the defendant can establish that the loss was not caused, or was

only partly caused, by the false information or omissions of the registration statement or prospectus. If a person buys a security before the publication of the first twelve-months' earnings statement of the issuing corporation after the date of registration, it is assumed that he relied on the information in the registration statement and prospectus. If the security is purchased later, reliance on the information must be proved. No member of an underwriting syndicate is now liable for an amount in excess of the aggregate price of his share of a security issue, and a suit to recover a loss must be brought within three years after the public offering of the securities.

TABLE 38. NEW CAPITAL FUNDS RAISED IN THE UNITED STATES, 1929-46

(Source: Board of Governors of the Federal Reserve System, *Banking and Monetary Statistics*, p. 487; *Federal Reserve Bulletin*, March, 1947, p. 302)

(In millions)

Year	Total New Security Issues ^a	Total New Corporate Security Issues	Year	Total New Security Issues	Total New Corporate Security Issues
1929	\$10,093	\$8,002	1938	\$2,360	\$ 873
1930	6,912	4,483	1939	2,277	383
1931	3,095	1,551	1940	1,951	736
1932	1,197	325	1941	2,854	1,062
1933	720	161	1942	1,075	624
1934	1,386	178	1943	642	374
1935	1,457	404	1944	913	646
1936	1,972	1,192	1945	1,772	1,264
1937	2,138	1,225	1946	4,588	3,506

^a Excludes refunding issues and direct issues of the United States government, but includes issues of foreign and domestic corporations, foreign governments, farm loan agencies, and states, municipalities, and territories.

The results of the operation of the Securities Act of 1933 have been both favorable and unfavorable. There is no doubt that a law encouraging honesty in the sale of securities was necessary for the protection of investors; but the Securities Act, even with the amendments noted above, was so drastic a measure that, besides preventing abuses, it has interfered seriously with the normal functioning of the investment banking business. The Act cleansed and purified the issuance of securities, but relatively few corporate securities have been issued, as the data in Table 38 indicate. From 1933 to 1945, inclusive, new corporate security issues in no year exceeded 15.3 per cent of those issued in 1929, and usually fell well below even this meager level. And, if it is objected that 1929 is an unfair year for purposes of comparison, we may say that there was no year from 1933 to 1945, inclusive, in which the total value of new corporate securities amounted to as much as 50 per cent of those issued in 1923—a year before

the period of large security issues in the late 1920's began.¹ In the reconversion year of 1946, new corporate security issues struggled up to about 44 per cent of the 1929 volume.

It is true, of course, that the years 1933 to 1940 were not very prosperous ones, but, according to modern business cycle theory, one cannot logically charge a depression with *causing* a shortage of investment, for a shortage of investment *is* a depression. Moreover, physical conditions in the late 1930's were favorable for heavy investment, since industrial plant and machinery had become increasingly decrepit during the long depression and housing construction had been lagging for many years. It is likely, then, that the Securities Act had a sharp restraining effect on the issuance of new securities, and the reasons are not far to seek.

Under the rulings of the Securities and Exchange Commission, the prospectuses furnished to investors have always run over 20 pages in length, and 70 pages are very common.² The registration statements which the Commission requires are far more elaborate and voluminous. Both documents must be checked and doublechecked by expensive lawyers and accountants, and the cost of preparing them has run as high as \$150,000 or \$200,000 in individual cases. Moreover, it takes a brave man to accept legal responsibility for all the facts contained in a 70-page prospectus or a registration statement which may run into several volumes. It is small wonder that corporations have hesitated to issue new securities. The remedy for this situation is obvious. Registration statements should probably be abandoned altogether, and it should be made possible for prospectuses for investors to be brief, although their legal characteristics should be retained. That is to say, the prospectus should reveal the material and relevant facts, and should be a document on the basis of which men may be sued for damages or otherwise punished if they falsify or omit material facts. In this way the objectives of the Securities Act could be attained without preventing the issuance of worth-while securities.

The Securities Exchange Act. In any case, the Securities Act did not afford full protection to investors, since it covered only new security issues and many investors had lost their all by purchasing securities already existing on the exchanges. Moreover, while most bonds are publicly offered, many issues of stock were formerly distributed through the security exchanges, often by manipulative practices of the type cited earlier in the chapter. For example, when an issue of stock was to be distributed, the first step was to register it, say on the New York Stock Exchange. Then the owners of the issue would make it appear active on the exchange by hiring brokers both to buy and to sell the issue for the account of the owners. For a time they might have to buy more than they sold, so that the price

¹ B. M. Anderson, in *Financing American Prosperity*, New York, Twentieth Century Fund, 1945, p. 38.

² *Ibid.*, p. 39.

of the stock would show a steady rise. But eventually the public, attracted by the activity and price rise of the stock, would come into the market; and then the brokers, by selling more shares than they bought, could distribute the issue at the artificially high price.

The Securities Exchange Act, passed in 1934, aims to discourage such practices. Besides amending the federal Securities Act of 1933, as previously noted, it requires all security exchanges, unless exempted by the Securities and Exchange Commission, to be licensed by the Commission after furnishing certain required information. Every security issue listed on the exchanges must also be registered with the Commission by the issuing corporation. The registration statements must contain facts in ten categories enumerated by the Act, in addition to any further financial statements which the Commission may deem necessary. The corporations may also be asked to file certified reports periodically. The result is that many corporations are now required to register with and furnish information to the Commission, although they would have been exempt from such obligations under the federal Securities Act of 1933 because they have not recently attempted to issue new securities.

Control of Manipulative Practices. The Securities Exchange Act attempts to define, or give the Commission power to define, the functions of brokers, dealers, and specialists, and forbids certain manipulative practices under penalty of \$10,000 fine and two years' imprisonment, or both. Under this Act, pools which are organized to make money by forcing the prices of certain securities up or down may no longer use publicity to advance their interests. They are prohibited from circulating false and misleading information about a security, from circulating any information, true or false, about prospective rises or falls in prices because of pool activity, and from paying anyone directly or indirectly for circulating such information. The creation of fictitious market activity is also forbidden. That is, it is now unlawful for any person, directly or indirectly, alone or with others, to effect a series of transactions in a registered security creating actual or apparent trading in such security or raising or depressing its price to induce purchase or sale by others. It is illegal to use the facilities of the exchanges, or of interstate commerce, or to use the United States mails for such purposes.

Corporate directors, officers, and stockholders who own 10 per cent or more of an issue of securities must file a statement with the Commission setting forth their holdings, and must report changes in ownership during each month. If officers and directors buy and sell the securities of their own corporations within a six-month period and make a profit, the gain belongs to the corporation and may be recovered by legal action. Moreover, these officers and directors are not allowed to make "short sales" of the stocks of their corporations, in order to profit by declines in the prices of these securities. Short-selling, as a manipulative device, is brought

under the Commission's control, to be regulated as it may deem advisable. It may require exchanges and exchange members to report short sales daily, and to report the coverage of short sales. "Pegging" the price of a security, through purchases by its sellers while the security is being marketed, is tolerated only under rules and regulations to be laid down by the Commission. Finally, the Board of Governors of the Federal Reserve System is given the power to control margin requirements for borrowing on securities.

Appraisal of the Securities Exchange Act. Our appraisal of the Securities Exchange Act must be similar to that of the Securities Act. There is no doubt that the security exchanges and manipulative practices on the exchanges could stand some regulation or that the Act, as administered by the Commission, has been successful in cleansing and purifying the exchanges and their activities. On the other hand, it is equally clear that the Act and its administration have reduced activity on the security exchanges to a low level and made the market for securities "thin." That is, large changes in security prices now occur on the basis of relatively small volumes of buying or selling. For example, on twelve days in 1930 and 1931, over 13,000 shares were sold for each one per cent decline in stock prices and over 23,000 shares for each decline of one dollar. On twelve days in 1936 and 1937, only 4700 shares were sold for each one per cent of decline in stock prices and only 6700 shares for each decline of one dollar. On September 7, 1937, the figures were 2100 and 3400 shares, respectively.³

The dearth of speculative activity and the thinness of the market are due to a number of factors, some of which, such as high taxes on income in general and on capital gains in particular, are unconnected with the securities and exchange legislation. On the other hand, there are several phases of the Act and its administration which have interfered greatly with activity on the exchanges. The regulation of the buying and selling of the securities of their own corporations by officers and directors has prevented these individuals from taking advantage of inside information to make a profit on the exchanges, but it has also kept them from buying to support the prices of their securities when they felt the prices were becoming unwarrantedly low and from selling these securities when they thought the prices were becoming unduly high. High and inflexible margin requirements, severe regulation of the activities of specialists and floor traders, and the Commission's practice of questioning brokers and their customers concerning individual transactions on the exchanges have also operated to restrain legitimate speculative activity. Many of these matters could be corrected by a more liberal administration of the Act by the Commission, without changes in the Act itself and without great danger to its basic and desirable objectives.

³ *Ibid.*, p. 40.

The Total Volume of Investment Credit. While important though somewhat too drastic steps have been taken in the direction of providing safety for investors, very little has been done about certain other problems in the field of investment banking. One problem which must be faced in any economic system is the relative distribution of productive resources between (1) providing for present consumptive wants and (2) providing for the future through the production of capital goods. So long as productive methods remain the same and productive resources are scarce, we can enjoy a more abundant life in the future only at the expense of present consumption. Both saving and investment are necessary to the production of capital goods, and the investment bankers, through their sales of security issues, are supposed to coordinate these processes.

Prior to 1933, the investment bankers performed this function with only moderate success, for their business operated by fits and starts. In times of business prosperity, investment credit would sometimes flow in a veritable flood and get well in advance of current savings available for investment, since commercial banks would lend funds to customers to enable them to acquire securities on the installment plan. Such periodic overextensions of investment credit were partly responsible for building up the business booms which in turn gave way to depressions. At other times, the flow of investment credit would dry up until it was a mere trickle, although saving would go on at a moderate rate at least. Since 1933, the flow of investment credit has fluctuated considerably from year to year, but the total volume issued by the investment bankers has been so low at all times that its instability has undoubtedly been less important than formerly.

Of course, the investment bankers are not wholly to blame for periods of over- and under-investment, much less for business booms and depressions. Indeed, we have already seen that they are middlemen in the investment process, acting in response to the demands of business for investment credit and the demands of individuals and institutions for securities. The bankers could scarcely market securities in dangerously large quantities unless corporations wanted huge amounts of investment credit and people could be found to buy the securities at such times. And security purchasers could not indulge their wild desire to get rich quick by buying stocks and bonds unless the commercial banks lent the funds necessary to finance these purchases. However, the investment bankers must accept some responsibility for the instability of their business.

Those who engage in business in our modern economic system find it necessary to forecast future economic conditions, such as the probable extent of markets and the prices of certain commodities. In days of prosperity, they become unduly optimistic and overestimate future earnings. This is as true of investment bankers as of business men in general. When business is good, profits are large, security prices are mounting,

and the future demand for consumption goods and the facilities for producing them seems unlimited, it is easy for investment bankers to overestimate the need for investment credit. And, because of the crucial importance of the extension of investment credit, the mistakes of investment bankers are likely to have rather wide repercussions.

The Distribution of Investment Credit Among Industries. The achievement of an appropriate distribution of investment credit among industries and businesses has been another problem of investment banking in the past. Since the quantity of funds available in our economic society is not sufficient to finance all the undertakings in which business men would like to engage, it is clear that some enterprisers will get the funds that they want while others go without. And since most of our industrial financing in the past was done through the investment banking houses, it is equally obvious that our investment bankers have exercised a large degree of control over production. In a very real sense, they have held the power of life and death over a large part of the productive activities of the economic world, since they were in a position to provide the funds that a given concern needed and thus insure its operation, or veto its appeal and thus seal its doom.

The best interests of society require that whatever capital funds there are shall be distributed in such a way as to promote the most essential industries—that is, those which will contribute most to the welfare of society as a whole or whose products are most needed and desired by the people. However, the investment bankers were motivated by the desire for profit in distributing investment credit among industries and tended to extend the credit to those firms and industries which could pay most for its use. In many cases the firms and industries which could bid most effectively for investment credit were also those which deserved to receive it from the social point of view, but we could not expect this to be universally true. Thus funds might be directed by profit-seeking bankers into the construction of palaces for multimillionnaires, leaving none available for the building of "model apartments" for working people, even though the millionnaires were already magnificently housed and the workers were living in slums.⁴

The Domination of Industry by Investment Bankers. Investment bankers have often required, as a condition of issuing investment credit to a corporation, that the corporation appoint on its board of directors one or more members of the banking house, ostensibly for the purpose of insuring the safety of the security issue. This requirement appears innocent enough on the surface, but Americans in general were some-

⁴ While the problem of allocating investment credit among industries would continue to be important, the control of this distribution by investment bankers would no longer be a significant issue if these bankers, in the future as in the recent past, provided only relatively small total sums of investment credit for industry.

what startled, some years ago, to learn that one investment house in this country, together with its dependents and allies, was represented by directorships in corporations with net assets of some 74 billion dollars, or about one-fourth of the total of American wealth at the time. This power was centered in the hands of some 167 persons in the banking house, and they held 2450 interlocking directorships in corporations.⁵ It is difficult to say to what extent investment bankers control the policies of corporations at present, but certainly it would be socially undesirable for this control to develop so far that a small group of private persons, acting as investment bankers, could dominate the economic activities of the country.

A Proposed Solution. We have already seen that the problems of investment banking declined in importance after 1933 because of the very low level of activity which prevailed in the investment banking business. During the period of World War II, these problems became still less significant, for the government acquired and used a very large part of the savings of the country. Thus in 1945, when new corporate security issues amounted to only 1264 million dollars, net savings of individuals in the United States were in the neighborhood of 35 billion dollars and the gross federal debt increased by about 57 billion dollars.

Some people argue that, in the post-war period, we should proceed to put the investment bankers out of business entirely and socialize the extension of investment credit. The government would presumably absorb the savings of individuals through the sale of government bonds, and delegate to a board, probably one similar to the Board of Governors of the Federal Reserve System, the task of distributing investment credit among the industries and businesses of the country. The board would be appointed by the President of the United States. Its members would serve long terms, which would expire in rotation. They would be paid adequate salaries and be required to sever all private business connections.

In this way, it is claimed, the problems which we have discussed would be solved. There would no longer be any question of the issuance of fraudulent or worthless securities. The board would regulate the total volume of investment credit in accordance with the needs of society, and would not be induced, by any considerations of profit or loss, to over-expand credit at certain times and limit it unduly at others. All the savings absorbed by the government would be put to some productive use. The board's aim would be to distribute credit among our economic activities so that those which needed further development would be expanded, while the others would be held in check—for the members of the board would have no reason for preferring one industry to another.

⁵ H. W. Laidler, "Have We a Money Trust?" in *The World Tomorrow*, September, 1931, pp. 282-284.

Finally, the danger of domination of the country's economic activity by a small group of private bankers would be removed.

Criticism of the Plan. It seems far from certain that the governmental ownership and operation of investment banking would actually solve all of these problems, if all or most other industries and businesses were left under private ownership and operation. We may admit that the problem of safety for investors would be solved, but it would seem that a government board, like private bankers, might be too optimistic at certain times and too pessimistic at others, so that the issuance of investment credit might be marked by wide fluctuations as in the past. It would be no easy matter for the board to determine society's true need for investment credit from year to year. The problem of distributing such credit among industries and businesses in accordance with the social need would still be a difficult one, and mistakes could be made by a government board quite as well as by private bankers.

Finally, the board would eventually influence economic activity far more strongly than the investment bankers have ever done, and there is no assurance that governmental control would provide a remedy for the ravages of private control. Under governmental ownership and operation, the issuance of investment credit might be backward rather than progressive, so that new industries could not develop as in the past, because of the government's unwillingness to assume risks. The issuance of investment credit would be involved in red tape and subject to political control, and political "pull" would be used in obtaining desired funds.

If the governmental ownership and operation of investment banking were to be accompanied by the socialization of all or almost all of the other industries and businesses of the country, we may concede that the problems of investment banking as a private business could be solved or would disappear. However, in that case we would have on our hands a planned and controlled socialist economy, and would have solved or eliminated the problems of capitalism by accepting those of socialism. Could we keep any significant degree of economic and political freedom in a planned socialized economy? Would such an economy be efficient and progressive? Would it furnish a high level of income? Would individuals have adequate incentives? Could economic planners suit production to basic human needs and desires more effectively than the capitalistic price system does? Questions of this sort will be discussed at length in Chapter 49. For the present we merely suggest that such things as a degree of instability in economic activity and some inefficiency in the distribution of resources among industries may be part of the price we have to pay for the privilege of living in a free society.

1. What are the ways in which business enterprisers may obtain funds for investment in fixed capital?
2. What is the function of the investment bank?
3. Explain what is meant by the "selection," "underwriting," and "distribution" of securities.
4. Show the way in which fixed capital is provided through the reinvestment of earnings.
5. What are the problems of investment banking?
6. Explain how the problem of providing safety for security purchasers became acute in recent years. How did the federal Securities Act of 1933 undertake to provide this safety?
7. Criticize the federal Securities Act both constructively and destructively.
8. "The federal Securities Act, besides preventing abuses in the issuance of securities, has interfered seriously with the normal functioning of the investment banking business." Explain.
9. Why was additional legislation necessary for the protection of security purchasers? How was the Securities Exchange Act of 1934 supposed to be helpful in this connection?
10. "The results produced by the Securities Exchange Act and its enforcement have been both favorable and unfavorable." Explain.
11. What problem exists in connection with the total volume of investment credit issued by investment bankers? To what extent are the investment bankers themselves responsible for the existence of this difficulty?
12. Do investment bankers distribute investment credit among industries and businesses in true accordance with society's needs? Explain.
13. "It is obvious that our investment bankers exercise a large degree of control over production." In what way?
14. Can the problems of investment banking be solved while this business remains in private hands?
15. "The socialization of the investment banking business would readily solve or eliminate all of the problems of investment banking." Discuss.

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Price Levels

THE STUDY OF PRICES, AS PURSUED BY ECONOMISTS, FOLLOWS TWO MAIN LINES of inquiry. The first of these seeks to explain the forces that determine the prices of individual commodities and services.¹ The second line of inquiry has to do with general, or average, prices. The general prices of one time are compared with the general prices of another time, and an effort is made to measure and explain any changes that may have taken place. The general prices of a given time—say, of the year 1947, or of a single month of that year—are frequently called a “price level.”

THE DETECTION AND MEASUREMENT OF PRICE LEVEL CHANGES

General prices at different times, say in two or more different years, may be compared through the use of a device known as the “index number.”

The Making of Price Index Numbers. Index numbers of general prices are constructed by choosing a *base year*, in which general prices are given a rating of 100, and then giving to prices of other years ratings either higher or lower than 100, depending upon whether the prices of those years are higher or lower than the prices of the base year.

The principle of index numbers will be better understood if we consider a simple table and describe, with actual prices, the manner in which the index numbers are arrived at. Table 39 is made up of the prices of five commodities for the years 1926, 1920, and 1947. The prices here given are from wholesale quotations of those years. Wholesale prices are used because accurate wholesale quotations can be secured more readily than accurate retail prices, and, moreover, they vary less throughout the country than retail prices.

The year 1926 has been chosen as the base year. The individual prices of that year are added, and to this aggregate is given a rating of 100 per cent. The percentages for the other two years are arrived at by comparing the aggregate prices of those years with the aggregate for 1926. Dividing the aggregate for 1920 (\$1.79) by the aggregate for 1926 (\$1.55), and

¹ Individual prices were dealt with in vol. 1 (chaps. 12–17).

multiplying by 100, we get the index number of 115 for 1920. In like manner we arrive at an index of 128 for 1947. The index number for 1926, the base year, is, of course, 100.

Weighted and Unweighted Index Numbers. These three index numbers are "unweighted"; that is, the five commodities that we have used have affected the total index number in proportion to their *prices per unit*, and not in proportion to their relative importance in the total volume of the country's trade. But some items enter much more extensively into trade than others, and the large sales of such goods entitle them to special consideration in the construction of indexes. Consequently, it is now the custom to "weight" index numbers, multiplying the price of each commodity by a number indicating its relative importance in total

TABLE 39. CONSTRUCTION OF UNWEIGHTED INDEX NUMBERS

The aggregate of the 1926 wholesale prices of five commodities being used as a base, the "relatives" (or percentages) for 1920 and 1947 are computed by dividing the aggregates of the latter years by the aggregate of the base year, and multiplying by 100. The results are the unweighted index numbers for those years. The method is called the "relative of aggregates."

Commodities	Prices per Unit		
	1926	1920	1947
Butter (per pound).....	.40	.67	.68
Eggs (per dozen).....	.30	.48	.54
Coffee (per pound).....	.58	.15	.24
Lead (per pound).....	.08	.09	.15
Cotton (per pound).....	.19	.40	.38
Aggregate Prices.....	\$1.55	\$1.79	\$1.99
Unweighted Indexes.....	100	115	128

trade, so that the part played by each item in influencing the final index number is determined by the quantity of that commodity that is bought and sold.

If we assume that the sales of butter, eggs, coffee, lead, and cotton amount to 20,000, 30,000, 10,000, 5,000, and 20,000 units, respectively, we may compute *weighted* index numbers which reflect more accurately than *unweighted* indexes the changes that have taken place in general purchasing power. These revised index numbers, as is shown in Table 40, are 100 for 1926, 140 for 1920, and 150 for 1947.

There are many series of price indexes in this country that have been constructed with care and are being kept up to date. The late Professor Irving Fisher, of Yale University, used to publish a weekly *commodity* index based on 120 items. Carl Snyder for many years published a *general* index in which were included not only wholesale and retail commodities but many other items. The United States Bureau of Labor Statistics com-

putes a *cost of living* index, month by month. One of the best indexes of *wholesale commodity prices* is published by the Bureau of Labor Statistics.

Snyder's General Price Index. As we have noted, Carl Snyder's index of general prices included a wide variety of items. It was, indeed, an *index of indexes*, for Dr. Snyder computed his index numbers from twelve separate indexes compiled by government bureaus, the Federal Reserve Bank of New York, and several other agencies. The twelve types of prices that went into the making of this general index were security prices, composite wages, retail food prices, prices of equipment and machinery, farm prices at the farm, automobile prices, wholesale hardware prices, rents, realty values, other cost of living items, transportation costs, and industrial commodity prices at wholesale. Because it included a wider

TABLE 40. CONSTRUCTION OF WEIGHTED INDEX NUMBERS

The individual prices are multiplied by the quantities sold. An aggregate of these total prices is found for each year, and the index numbers are arrived at by dividing each of these aggregates by the aggregate for the base year, and multiplying by 100. The results are weighted index numbers.

Commodities	Units Sold Annually	1926		1920		1947	
		Unit Price	Total Price	Unit Price	Total Price	Unit Price	Total Price
Butter (per pound)	20,000	.40	\$ 8,000	.67	\$13,400	.68	\$13,600
Eggs (per dozen)	30,000	.30	9,000	.48	14,400	.54	16,200
Coffee (per pound)	10,000	.58	5,800	.15	1,500	.24	2,400
Lead (per pound)	5,000	.08	400	.09	450	.15	750
Cotton (per pound)	20,000	.19	3,800	.40	8,000	.38	7,600
Aggregate Prices			\$27,000		\$37,750		\$40,550
Weighted Indexes			100		140		150

variety of items than any other index of prices, this general price index has often been used for calculating the purchasing power of money, but only up to and including the year 1939, for this index was discontinued in 1940.

Wholesale Commodity Price Index of the Bureau of Labor Statistics. We must take time, however, to describe briefly the index of wholesale commodity prices to which we referred above. For many years the Bureau of Labor Statistics has compiled, month by month, an index of commodity prices, which is of importance not only because it is constructed with great care from a great many commodity prices, but also because it is cited so often in current newspaper and magazine articles. Probably no other index of prices is so widely used. It is now made up of the wholesale prices of more than 800 commodities; and these commodities include farm products, foods, hides and leather products, textiles, fuel and light-

ing, metal and metal products, building materials, chemicals and drugs, house furnishings, and miscellaneous goods. The base year of the index has been changed from time to time as the Bureau has deemed desirable. At present, 1926 is the year on which the index is based.

The number of items entering into an index is not a matter of hard and fast rule. Some indexes include many items and others relatively few, but the exact number appears to be much less important than the exercise of care in choosing representative samples. Professor Fisher, who wrote widely on the subject, felt that an index which did not include more than 20 items was seldom of much value. He regarded 50 items as a much more satisfactory number. "After 50," he said, "the improvement obtained from increasing the number of commodities is gradual and it is doubtful if the gain from increasing the number beyond 200 is ordinarily worth the extra trouble and expense."²

The index of the Bureau of Labor Statistics goes back as far as 1890, but the figures for years prior to 1926 are based on fewer commodities than are the figures since 1926; however, to quote an official statement of the Bureau, "they may be considered comparable for all practical purposes." This index, like that illustrated in Table 40, represents a "relative of aggregates"; moreover, all of the items that have been used, unlike those of Table 39, have been carefully weighted by multiplying individual prices by the quantities sold.

Cost of Living Index. The cost of living index of the Bureau of Labor Statistics is based upon the prices of commodities and services purchased by wage earners and lower-salaried workers in thirty-four large cities of the United States. The prices of food, rent, clothing, house furnishings, fuel, light, and miscellaneous items go into the making of this index. It is, therefore, the best index we have of the prices of the kinds of goods for which most of the money income of most of the people of the United States is currently spent. The base used is the average prices of these goods during the five-year period 1935 to 1939, inclusive. This cost of living index has been computed for all years as far back as 1913. In several of our illustrations we shall treat this index as though it included *all* prices, and as if it were therefore an index of *general prices* or the *price level*.

The Cost of Living and Purchasing Power. In Table 41 are given the index numbers of the cost of living (or price level), of the purchasing power of the dollar, and of wholesale commodity prices, for the years 1913 to 1947, inclusive. A comparison of Columns 1 and 2 shows that when the cost of living index is high the index of purchasing power is low, and vice versa. This is necessarily the case, since the index of purchasing power is obtained by dividing the price index of the base year (in the

² Irving Fisher, *The Making of Index Numbers*, Boston, Houghton Mifflin Company, 1922, p. 340.

TABLE 41. INDEXES OF COST OF LIVING, PURCHASING POWER OF THE DOLLAR, AND WHOLESALE COMMODITY PRICES, 1913 TO 1947^a

(Source: United States Bureau of Labor Statistics)

Year	Cost of Living Index	Index of Purchasing Power	Wholesale Commodity Index
1913	70.7	141.4	70
1914	71.8	139.3	68
1915	72.5	137.9	69
1916	77.9	128.4	85
1917	91.6	109.2	117
1918	107.5	93.0	131
1919	124.5	80.3	139
1920	143.2	69.8	154
1921	127.7	78.3	98
1922	119.7	83.6	97
1923	121.9	82.0	101
1924	122.2	81.8	98
1925	125.4	79.7	103
1926	126.4	79.1	100
1927	124.0	80.6	95
1928	122.6	81.6	98
1929	122.5	81.6	96
1930	119.4	83.8	86
1931	108.7	92.0	73
1932	97.6	102.5	65
1933	92.4	108.2	66
1934	95.7	104.5	75
1935	98.1	101.9	80
1936	99.1	100.9	81
1937	102.7	97.4	86
1938	100.8	99.2	79
1939	99.4	100.6	77
1940	100.2	99.8	79
1941	105.2	95.1	87
1942	116.5	85.8	99
1943	123.6	80.9	103
1944	125.5	79.7	104
1945	128.4	77.9	106
1946	139.3	71.8	121
1947 (Mar.)	156.3	64.0	150

^a Base for cost of living and purchasing power indexes, 1935-39 average; for wholesale commodity index, 1926.

present instance, the *average* for 1935-39, which happens to be approximately the same as for the year 1940) by that of another year, and multiplying by 100. We see, then, that a United States dollar in 1913 bought 141 per cent as much as in 1940; but in March, 1947, it bought only 64 per cent as much as in 1940. Therefore, the purchasing power of the dollar was great in 1913, but small in 1940; and the price level was low (71) in 1913, and high (156) in March, 1947.

Curves of Index Numbers. The cost of living index and the index of purchasing power for each of these thirty-five years are plotted in Fig. 41, so that the changes from year to year may be noted readily.

The horizontal line opposite the index number 100 shows the kind of price "curve" we would have had, had there been no changes in prices during the period in question. The curve indicating the price level that actually prevailed in these years shows that from 1913 to 1916 prices were fairly stable; that there was a sharp advance from 1916 to 1920, then a sudden fall to 1922; that from 1923 to 1930 prices were again fairly stable, though on a much higher level than between 1913 and 1916; and that after 1930 there was a steady decline to 1933, followed by a slight upturn in 1934 which continued to 1937 but declined for two years thereafter, only to rise sharply from 1940 to 1947 in response to the stimulus of World War II and the shortages of goods in the post-war period. The peak of prices was reached in 1947, with the price level even higher than in 1920, a year in which prices were twice as high as before World War I—so high, indeed, that the purchasing power of the dollar was only 45 per cent as great in March, 1947, as in 1913.

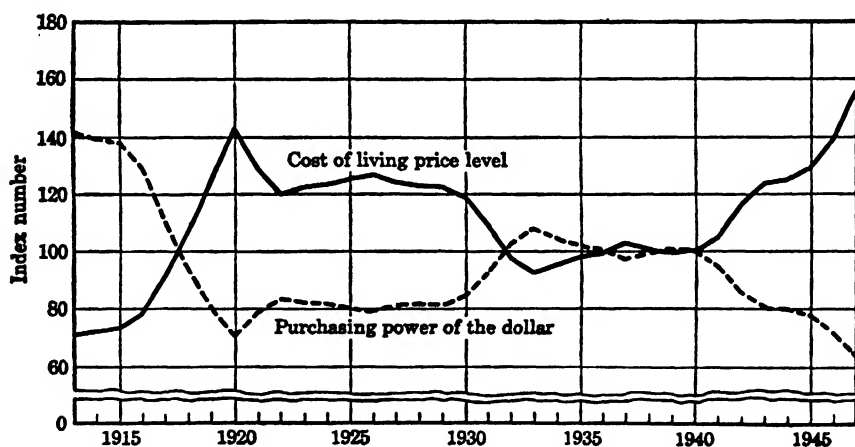


FIG. 41. COST OF LIVING AND PURCHASING POWER OF THE DOLLAR, 1913-1947
(See Table 41)

Changes in the Value of Money. We have noted that the index of purchasing power of the dollar varies inversely with the general price index. Whenever the latter is higher than 100, the former is below 100. This fact is shown graphically in Fig. 41. Every advance in the price index indicates a decline in the value of money, and vice versa. In 1947, for example, when the cost of living index was 156, the index of purchasing power was 64. This means that the value of the dollar was approximately two-thirds as great in 1947 as in 1940. The index of purchasing power, then, is also an index of the value of money.

POSSIBLE CAUSES OF CHANGES IN PRICE LEVELS

Our reference to money in the preceding paragraph suggests that money may have something to do with changes in price levels. This relationship between money and general prices is set forth in the Quantity Theory of Money. The theory states that general prices tend to vary directly with the quantity of money—or, as some quantity theorists say, with the quantity of money and credit—in circulation. This means that if the quantity of money is increased, other things remaining unchanged, the price level will rise; and if the quantity of money is decreased, other things remaining unchanged, the price level will decline.

The Equation of Exchange. The “other things” to which we have referred are (1) the velocity of circulation of money, and (2) the volume of trade. The velocity of circulation refers to the “rate of turnover” of money, or the number of times that it is used in a given period. We saw in an earlier chapter that money may have a turnover of twenty-five or thirty times a year; that is, the same dollar may be used in twenty-five or thirty purchases in a twelve-month period. The volume of trade relates to the total number of exchanges that take place in a given time; of course, an exchange is made every time a thing is bought or sold. With these facts in mind, we may set down a formula, which is known as the “equation of exchange,” from which we shall exclude “credit” for the present, but include it later. We assume for the moment, then, that all goods are paid for with money. The equation of exchange, under these

simple conditions, would be stated thus: $P = \frac{MV}{T}$. In this formula, P

relates to the price level, M to the quantity of money, V to the velocity of circulation (or turnover) of money, and T to the volume of trade, or total number of exchanges. We have already noted that money is desired ordinarily not for its own sake, but almost exclusively because of its usefulness in buying economic goods. This being the case, it is probable that all of the goods that are offered for sale will exchange for all of the money that is available, since purchasers, in their desire to secure goods, will bid higher and yet higher prices for the goods they wish, until the limited quantity of money prevents further bids.

Our equation of exchange is merely a convenient way of expressing this fact, and what it says in effect is that, for a given period of time, prices in general are determined by the relationship between MV and T. It will be apparent, therefore, that any change in M or V, without a corresponding change in T, will cause a change in P. If, for example, the quantity of money (M) should increase, the other factors remaining constant, the price level will rise. An increase in the velocity of circulation (V), without change in the other factors, will have a similar effect. And if the volume of trade (T) should increase, without a corresponding

change in either the quantity of money or the velocity of circulation (or both), the price level will experience a decline. It is evident, then, that there is a relationship among these three factors, and that a change in any one, without some offsetting change in either one or both of the others, is bound to affect the price level. As Professor Cassel puts it, "The existing quantity of money must involve a definite performance of payments, to which the level of prices is obliged to adjust itself."³

Examples of the Equation of Exchange. The possible effects upon the price level of changes in the quantity of money in circulation, the velocity of circulation, or the volume of trade, may be illustrated by several examples. Let us assume, in order to make our conditions very simple, that the total amount of money in circulation is \$5000; the velocity of circulation is 30; and the total trade is 150,000 "goods units," every goods unit being exactly like every other, and each consisting of 1/150,000 of the total quantity of every kind of economic goods entering into trade during the period under consideration.⁴ Under these conditions, the price of a goods unit may be ascertained by recourse to our formula. Substituting the known quantities for M, V, and T, we have the following equation:

$$P = \frac{\$5000 \times 30}{150,000}. \text{ The price of a goods unit, therefore, is \$1.00. Since a}$$

goods unit represents all kinds of goods, we may say that a unit of *goods in general* sells at this time for \$1.00; and by giving to this amount an index number of 100, we may compare prices at other times with prices at this time, provided we have specific figures to substitute for the symbols in the equation of exchange.

If we suppose, by way of illustration, that a year later the quantity of money was twice as great as in the above example, but that there had been no change in V or T, a simple calculation will show that the price of a goods unit would be \$2.00, and the index number 200; and if the quantity of money were to fall to \$2500, with no change taking place in the other factors, the price would necessarily drop to 50 cents, and the index number to 50.

If M and T were to remain constant at \$5000 and 150,000, respectively, while V (the velocity of circulation of money) changed from 30 to 15, we should again have a goods unit selling at 50 cents, and the index number of general prices would be 50. If M and V should remain con-

³ Gustav Cassel, *The Theory of Social Economy*, New York, Harcourt, Brace & Company, Inc., rev. ed., 1924, p. 426.

⁴ The assumption involves the supposed division of the whole of every kind of economic goods that is sold (both commodities and services) into 150,000 equal parts, and the combination of one fractional part of each of these items into a single unit, which we are calling a goods unit. Each goods unit would then consist of 1/150,000 of the total volume of trade, and would therefore represent not only all items but also the proportion to which every item entered into trade. Readers who are familiar with Professor Fisher's "goods dollar" or "commodity dollar" will note here a family resemblance to that well-known concept.

stant, while T increased to (say) 300,000 units, then once more the price per goods unit would be 50 cents, and the index number of general prices would be 50.

These simple calculations demonstrate that a change in P may be the result of a change in M , V , or T , or a combination of changes in these three factors of the equation. Because we assumed that the *total volume of trade* consisted of goods units, there can be no question that the prices about which we have been talking are *general prices*, or *price levels*. Since we took as a base the period in which a goods unit sold at \$1.00, we were justified in placing the index number for that period at 100; and from this point it would follow logically that the index for the second period (with a goods unit selling at \$2.00) would be 200, and the indexes for the remaining three periods must be 50.

"Credit" in the Equation of Exchange. It is now necessary to make a modification in our equation of exchange as it has been described, since prices are affected not only by the quantity of *money* available for the purchase of goods, but by the quantity of *credit* as well. Indeed, credit plays a much greater part than money in influencing the price level, since the quantity of deposit currency available for the purchase of economic goods of various kinds is many times as great as the quantity of money actually in circulation. The general nature of the equation, however, remains unchanged. All that needs to be done is to insert two new factors, M' for credit, and V' for the velocity of turnover of credit. The formula, as revised, is as follows: $P = \frac{MV + M'V'}{T}$. If all the factors of this equation

except P are known, this unknown factor (representing the price level) may be ascertained just as readily as in the simpler form of the equation.

The Quantity Theory of Money. It is obvious, therefore, that the changes in the price level are brought about through changes in one or more of these several factors. Unfortunately, it is not possible to say with great exactness to what extent these factors do change from time to time. It is the contention of a group known as the "quantity theorists" that the important changes in price levels result from changes in M and M' , which are usually grouped together under the title, "circulating media." It will be recalled that there is a relationship, though not a very exact one, between money and credit, since credit, which exists chiefly in the form of deposit currency, is based upon money in the form of bank reserves; so that, within certain rather wide limits, the quantity of credit is fixed by the quantity of money.

The quantity theorists believe that changes in the velocity of circulation are not of sufficient importance to affect the price level greatly; that is to say, they are of the opinion that fluctuations in the velocity of circulation do not prevent the dollar from being employed just about as many times in one year as in another, over long periods of time. Though

they admit that the total volume of trade changes somewhat from time to time, they argue that fluctuations in T would not account for the great changes in price levels that have sometimes taken place. As for M and M' (money and credit), there can be no doubt that these items have fluctuated very greatly at times. The fact that their increases and decreases coincide rather closely with increases and decreases, respectively, in price levels, seems to indicate that the quantity theorists may have some justification for believing that money and credit are by all odds the most significant factors in bringing about these fluctuations in general prices.

Historical Verification of the Quantity Theory. An examination of conditions that existed between 1913 and 1920, a period during which general prices in the United States almost doubled, tends to corroborate the theory that money and credit are the most important influences in effecting changes in price levels. Table 40 shows that the general price index rose from 58 in 1913 to 113 in 1920. If the total volume of trade had been smaller in 1920 than in 1913, part, at least, of this increase in general prices might be attributable to T . But, as a matter of fact, production and exchange actually increased in the period under discussion. Almost nothing can be said with assurance about V and V' during these seven years, but it seems probable that they were not responsible to any appreciable extent for the tremendous increase in general prices.

When we examine M and M' , however, we discover increases in the quantities of these factors which suggest very strongly that the high price level of 1920 may properly be charged up to them. The concrete facts about money and credit in the period under discussion are these: In 1913 the total amount of money in the United States was less than \$4,000,000,000, but by 1920 it was more than \$8,000,000,000. The amount of *increase*, to be exact, was 116 per cent. This increase was due largely to shipments of gold from Europe to the United States. Credit in the form of bank deposits experienced an increase of 152 per cent from 1913 to 1920, jumping from less than \$9,000,000,000 to approximately \$22,000,000,000. Another increase in M' resulted from an extension of credit due to the rediscounting of commercial paper, and to a large volume of loans made on government bonds by the Federal Reserve banks. Finally, some \$16,000,000,000 worth of war bonds had been issued up to 1920, and these in many cases circulated almost as freely as money, thus increasing greatly the total quantity of circulating media.

With these facts before us, it is not difficult to believe that M and M' were largely responsible for the extremely high price level of 1920, as compared with the level of 1913. Another evidence of the influence of M and M' upon price levels is to be found in the gradual increase in general prices from 1900 to 1913. During this period the index number

rose from 44 to 58, 1926 being used as the base year; and during this same period there was a steady increase in both money and credit, resulting from the increased production of gold which had its beginning in the latter years of the nineteenth century. Finally, an examination of money and bank deposits for 1929 and 1933 shows an *increase* of about a half billion dollars in the quantity of money during this period, but a *decrease* of eight billions in the volume of demand deposits. This substantial net decrease in total circulating media in the United States was accompanied by a decline in the price level from 105 to 75. To quantity theorists the concurrent decline in the price level and the volume of circulating media appears to suggest a causal relationship between the two, and to provide further confirmation of the soundness of the quantity theory of money.

However, what we have said about high general prices going hand in hand with a large total volume of circulating media, and low general prices with a small total volume of circulating media, must not be thought to constitute conclusive proof that the volume of money and credit is the *cause*, and the price level, high or low, the *effect*. Indeed, there are a good many economists of high standing who believe that the opposite is true, and that changes in the total volume of circulating media may be the result of changes in general prices—that it is changes in P that lead to changes in M and M' , and not the reverse. But it is safe to say that there are few, if any, who would deny that the general level of prices, P , is affected by changes in M and M' , provided all other factors in the equation of exchange remain fixed.⁵

EFFECTS OF FLUCTUATIONS IN PRICE LEVELS

We may now examine briefly some of the results of changes in general prices. It should be remembered, first of all, that, barring transitional effects, it matters little whether prices are high or low. The equation of exchange shows that all goods entering into trade will exchange for all the money and credit in circulation. If, therefore, the quantity of circulating media of one period were double that of another period, with trade and velocity of circulation remaining unchanged, the price level would be just twice as high as it had been. Doubling the amount of circulating media, then, means a doubling of general prices, if V , V' , and T have not been affected; and it means also that a given standard of living now costs approximately \$6000 instead of \$3000, or \$20,000 instead of \$10,000.

But if this new price level should remain unchanged for a considerable length of time, wages and other forms of payment would also tend to be twice as high as they had been. We would then give twice as many dol-

⁵ Later in the chapter we shall note the concern that was caused by the enormous volume of liquid assets (some 225 billion dollars' worth, as of February, 1946) that accumulated in the active and post-war periods of World War II.

lars (or "counters") for a given amount of goods as were required to make the purchase prior to the increase in general prices; but no hardship would ensue, since wages and salaries would also consist of twice as many dollars (or counters) as had been received before the rise in prices took place. We see, then, that it is the *transitional effects*—the results of sudden and extensive price fluctuations—that cause the trouble that is experienced on account of changes in price levels. High prices and low prices are equally harmless, if only one or the other, once adopted, will "stay put." But changes in price levels may result in genuine hardship for some and unearned gains for others.

The Hazards of Long-Time Credit. These gains and losses are likely to occur whenever there is an extension of credit over a period of years during which changes in the price level occur. In lending or borrowing money, it is really purchasing power which is loaned or borrowed. If a business man had borrowed \$1000 in 1940 and repaid the loan in 1947, the amount of purchasing power returned to the creditor would have been 64 per cent of the amount received in 1940, and the creditor would have been the loser by \$360. If, on the other hand, this loan had been made in 1920 and returned in 1928, the borrower would have returned to the creditor \$1169 in purchasing power, instead of the original \$1000 borrowed, because of the decline in general prices. And if he had waited until 1933 to return the loan, he would have paid back \$1000 in money but more than one and one-half times as much purchasing power as he borrowed, since the \$1000 in 1933 would have bought about as much economic goods as \$1550 in 1920.

These simple illustrations show that debtors gain by paying their obligations when prices are high, and lose by paying when prices are low. Business men are borrowing all the time, sometimes to meet current expenses and again for the purpose of making additions to equipment. Changes in price levels may have serious consequences to such individuals if they happen to borrow when prices are high in order to make improvements, for, as we have seen above, they may have to repay the loans when prices are low, and this means that they must pay back more purchasing power than they received. Hence, creditors gain by reason of declines in the price level, *provided the fall in prices does not make it impossible for the debtors to make payment*. This proviso is important, for sudden and great fluctuations in price levels may make it impossible for debtors to meet their obligations, and force them into bankruptcy. In such event the creditors are, of course, far worse off than though the price level had remained unchanged, or had even risen so as to make the repayment of loans easy, in the manner described in the preceding paragraph.

The Problem of Fixed Money Income. Sharp rises in price levels also have serious effects upon persons living on incomes from fixed money

obligations. We may take the example of a retired business man living in 1913 on an annuity of \$6000. With prices as they were at that time, he could live quite comfortably on this amount. But in 1920 those same \$6000 would buy only as much economic goods as he could have secured in 1913 for \$2961, and his standard of living, of necessity, would have dropped accordingly. However, if he was still alive in 1933, he found that much of his lost purchasing power had come back. For his \$6000 in 1933 had 55 per cent more purchasing power than in 1920, since the index of purchasing power for 1933 was 108, as against 70 for the earlier year. This illustration could be extended to include all persons living on annuities, pensions, insurance benefits, or interest from bonds; all institutions (such as colleges) operating largely on endowments; and, to a somewhat lesser degree, salaried workers as contrasted with wage earners.

The Plight of the Salaried Worker. The term "salaried worker" refers here to types of wage earners whose incomes are on an annual or monthly, and not upon a weekly basis. This classification includes, of course, teachers, preachers, government employees, office workers, and a host of others. The important fact about the incomes of these persons is that, while salaries may change somewhat to meet changes in price levels, they almost invariably change very slowly. There is, for example, the case of the college teacher who in 1940 was receiving a salary of \$3000. This was a modest income, but with strict economy he was able to make ends meet. By 1947 his salary had increased to \$3500; but because of the increased prices that then prevailed he could buy with the larger salary only as much as \$2240 would have bought him in 1940. This is a typical example of the difficulties in which salaried workers find themselves in a period of rapidly increasing prices.

The Case of the Wage Earner. Skilled artisans and common laborers are usually referred to as "wage earners," in order to distinguish them from salaried workers. The wage earner is often, though not always, paid on a weekly basis, and the income he receives is the result of frequent bargainings. In many instances, wage earners belong to trade unions, and wage agreements are drawn up by officials of the unions every year or two, or as often as every six months. As a consequence of these frequent bargainings over wages (which take place with unorganized workers also), the earnings of the wage earners are more likely to keep pace with rising prices than are the earnings of salaried employees. Nevertheless, it is a fact, as may be seen by an examination of statistics, that increases in wages usually lag behind rises in prices. A wage agreement continues in effect, let us say, for six months; but during the six-month period prices may increase materially, and thus cause the wage earner to lose out to some extent so far as purchasing power is concerned. The

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point is expressed in the well-known saying, "Prices take the elevator, while wages climb the stairs."

It should be noted, however, that the money incomes of certain classes of wage earners may at times rise faster than the cost of living in periods of rising price levels. Government figures show that the cost of living in the United States as a whole rose only 7 per cent between August, 1939, and June, 1941, but the average weekly earnings of workers in ninety *manufacturing industries* increased 30 per cent in this period. These larger money wages are accounted for by greater regularity of employment, an increase in the length of the working week, by some workers "moving up from lower to higher paying positions as the defense industries called for increasing numbers of skilled and semi-skilled workers," and by some increases in *wage rates* due to the greatly increased demand for labor in essential defense industries.⁶ We see, therefore, that—in many cases at least—these larger earnings do not represent increased incomes *for the same amount and the same grade of work*. Moreover, the gains in real wages that come to some wage earners at the beginning of a period of rising prices may vanish fairly promptly, and even those who are thus specially favored are likely to lose out in the long run through the failure of their money wages even to keep pace with the mounting cost of living.

The Effects of Falling Prices. Our attention has been centered chiefly upon the results of *rising* prices, because increases in prices have particularly serious effects upon persons of relatively small incomes. When prices fall, the effects are the reverse, of course. Purchasing power, which has shrunk during the upward course of prices, expands again when prices are on the downward trend. It might be supposed that a balance would be reached in this way, but, so far as a given individual is concerned, there is no assurance that he will regain through falling prices anything like as much as he has lost through a rise in the price level. And it should be observed that, though salaried employees and wage earners ordinarily gain in times of falling prices *if they hold their jobs*, the fact is that unemployment is often painfully extensive at such times, as was shown during the period of declining prices and *increasing unemployment* in the post-1929 depression.

Business men who have goods to sell are usually gainers through advances in the price level, since their costs of production ordinarily do not increase so fast as the selling price of the finished product increases. As a consequence, business men sometimes welcome rising prices, since they feel that the gains made on the upgrade will be greater than the losses which are incurred when prices again decline. This is a matter which we shall touch upon again in the next chapter.

⁶ Cf. Meyer Jacobstein and Harold G. Moulton, *Effects of the Defense Program on Prices, Wages, and Profits*, Washington, Brookings Institution, 1941.

PROPOSED SOLUTIONS OF THE PROBLEM OF PRICE LEVEL CHANGES

Because of the disadvantages of changes in price levels, such as those which we have outlined, attempts have been made to discover a remedy for what many consider a serious economic disorder. In general, the proposals have been of two kinds. First, plans have been suggested for lessening the evil effects of price level changes without eliminating the changes in price levels themselves; and, second, there have been proposals for stabilizing prices through the control of the circulating media (M and M').

The "Market-Basket Plan." One of the most interesting suggestions for avoiding the harmful effects of price changes is known as the "market-basket plan." The Philadelphia Rapid Transit Company used this plan for more than a decade to guarantee its employees a stable standard of living; but it was abandoned when this corporation was reorganized as the Philadelphia Transportation Company. The plan was designed to keep wages and prices always on the same level. Since the price level could not be controlled by the Philadelphia Rapid Transit Company, this company did what appeared to be the next best thing; namely, it increased wages as the price level rose, and decreased wages as the price level fell.

The market-basket plan used an index number based on 184 articles which were in sufficiently "general use to influence accurately the changes in the purchasing power of the employee's dollar." Among these items were "rent, shirts, stockings, nut coal, kerosene, brooms, sewing machines, pork chops, gas, tobacco, quinine pills and haircuts." From time to time the articles used in making the index number were priced in the stores and markets patronized by P.R.T. employees. If, at the close of the year, prices were found to have varied as much as 5 per cent, the basic wage was changed to meet this variation. It was contemplated, therefore, that changes in wages would ordinarily be made only once a year; but a variation of 10 per cent or more for a period of three months was met by a corresponding change in money wages.

The purpose of the plan, as stated by the company, was "to assure to the employee and his family their present standard of living, in bad times as well as in good." This did not mean that P.R.T. employees had no opportunity to improve their standard of living. Wages could still be increased, as before, by convincing the management that higher wages should be paid. The P.R.T. market-basket plan simply assured the employee that his standard of living would not be affected by such a force as fluctuating prices, which were wholly beyond his control.

There would seem to be at least two possibilities of serious trouble in operating a plan of this kind. If prices, and consequently wages, took a

pronounced drop (say, to the extent of 20 per cent), it would probably be difficult to convince the employees that they were not being imposed upon. For the average worker finds it hard to understand that \$32 a week with a low price level means as much purchasing power as \$40 a week when the price level is higher. And if prices rose greatly (say, to double their base level), though the employee would surely not object to receiving \$80 a week in place of the usual \$40, it would probably be difficult for the company to secure sufficient revenue to enable it to advance wages to this extent.

Difficulties such as these were foreseen by the Philadelphia Rapid Transit Company when the plan was inaugurated, but the obstacle which finally emerged was of a somewhat different type. The decline in general prices which followed 1929 was accompanied by several P.R.T. wage cuts, based on their curve of falling prices. But in June, 1932, it was necessary (because of greatly reduced revenue resulting from the depression) to cut wages slightly below the point indicated by the price curve. In the face of this emergency, the market-basket plan was suspended temporarily. One year later, when both revenue and general prices had increased, the plan again went into active operation, with a rise in wages which brought the purchasing power of P.R.T. employees once more up to the level of predepression days, and continued to function until the company was reorganized.

Multiple Standard of Deferred Payments. A second plan for avoiding evil effects of price changes, which we shall not be able to examine in detail, relates to long-term credits. It is called the Multiple or Tabular Standard of Deferred Payments, and is similar in general principles to the P.R.T. plan. The idea is that debtors, in meeting their obligations, should pay to creditors not the number of dollars, but the quantity of purchasing power, that they have borrowed. If, under this plan, \$1000 were borrowed in 1940 and repaid in 1947, the payment would consist not of a mere \$1000 (which would buy in 1947 only as much goods as \$640 would have bought in 1940), but \$1563 (which in 1947 would buy as much goods as \$1000, the amount of money borrowed, would have bought in 1940).

Without going further into plans of this kind, it may be said that there would be numerous difficulties in the actual working out of such plans as we have reviewed. We have noted several of these difficulties. Still another is that of finding a thoroughly acceptable index for measuring price changes. It would appear that arrangements such as these are scarcely feasible so long as they are adopted by only a few persons or organizations.

The "Stabilized Dollar." Another attempt to solve the problem of changing prices is to stabilize prices through the control of the circulating media. One of the best-known plans of this type is usually referred to as the "stabilized dollar" or "compensated gold dollar," and has been associated with the name of the late Professor Irving Fisher.

We can give here only the barest outline of the plan. We have seen that a rise in prices means a fall in the value of gold, and vice versa. Professor Fisher wanted a dollar which would always buy the same amount of goods, and he proposed to get it by increasing or decreasing the amount of gold in the dollar as prices showed a tendency to rise or fall.

The plan includes:

1. A monthly index number.
2. The removal of all gold from circulation, and the use of circulating media consisting only of gold certificates.
3. A variation in the amount of gold that a "gold certificate" will command at the mint, this variation corresponding to general price changes.

We may see how the plan would presumably work, by assuming that all money in circulation is represented by one dollar, and that the index number is 100. Now let us suppose that the index number rises to 110. This means, of course, that sellers of goods are no longer willing to exchange their products for the amount of gold contained in a dollar, but demand the amount of gold contained in \$1.10. Since gold is thus actually less valuable than it has been, a gold certificate called a "dollar" should command more actual gold than it formerly did. Professor Fisher's plan would make this literally true; the gold certificate presented at the mint when the index number is 110 would *in fact* command 10 per cent more gold than it commanded when the index number was 100.

And now, since the gold certificate does exchange at the mint for the amount of gold demanded by sellers for their goods, namely, 110 per cent of the former amount, it will readily exchange for the same amount of goods as before the rise in the index number took place; for sellers are now getting in each gold certificate the amount of gold that they are demanding. In this way prices would forever remain unchanged, as expressed in gold certificates; or, more correctly, prices would always tend to fluctuate narrowly about the index number of 100.

Stability Through Credit Control. Until comparatively recent years, it was confidently believed by many persons that the Federal Reserve Banks and the Board of Governors of the System could halt the over-expansion of credit, and even do something by way of bringing about a contraction of credit, if such "interference" should be deemed necessary. The nature of the machinery of control over credit was described in Chapters 33 and 34.

In Chapter 34 we noted that the Board of Governors seemed to have control powers which would enable it to prevent the overexpansion of credit *in any ordinary situation*. But the situation it faced at the close of World War II was anything but ordinary. The financing of that war, as has already been explained, flooded the country with so much money and credit that the Board was powerless to prevent the serious inflation

which threatened if our wartime controls over *individual prices* (which were imposed shortly after our entrance into the war) were allowed to expire with the termination of the O.P.A. law authorizing them, as many of our business men recommended. We shall examine this agency of price control briefly in the concluding section of the present chapter.

Price Control vs. Price Freedom. Whatever devices may be used to control credit, and wherever the power to create credit may reside, the fact remains that it would be an almost superhuman task to determine the precise moment at which credit control should be exercised. For this reason some persons feel that disturbances created by the free functioning of an automatic price system are preferable to possible consequences of attempted control of the price level by political agencies. Past experience has shown that such attempts have sometimes aggravated existing difficulties, instead of alleviating them. On the other hand, to abandon all hope of exercising conscious control over economic phenomena is to adopt an unnecessarily fatalistic attitude. We cannot undertake here to compare the relative merits of economic planning and economic automaticity, but it is clear that this broad issue is involved in any comprehensive proposal to stabilize the price level by interfering with its free and "natural" movement.

WARTIME AND POST-WAR PRICE CONTROL

The serious inflation which accompanied World War I enriched some persons while impoverishing others, and increased the cost of that war by about 150 per cent. It was doubtless the recollection of this "by-product" of World War I that led the United States government, even before the attack upon Pearl Harbor, to adopt measures designed to prevent a disastrous rise in prices from taking place during World War II.

The Dangers of Too Much Money. Our study of price fluctuations has shown that a substantial increase in the quantity of circulating media without a corresponding increase in the quantity of goods (the velocity of turnover of money and credit being neglected in the interests of simplification) inevitably raises the price level. The situation faced in World War II was a very great increase in the quantity of money and credit, and a serious decrease (instead of increase) in the quantity of goods available for civilian purchase. Total production in the United States increased enormously during the war, but the current output of goods consisted largely of things which either were not wanted or could not be obtained by civilians. Under these circumstances, the buying public, with an unusually large number of dollars at its disposal, tended to bid excessively high prices for the limited quantity of goods offered for sale. The natural result, unless interfered with, would have been a rapid rise in the general price level.

Relieving the Public of Excess Money. During World War II, the government took measures to relieve the consumers of the excess money which could do them no good and might do much harm. Taxation was one of these measures; and in each of the wartime years many billions of dollars in taxes were collected from Americans. The sale of bonds, which also took from people money which (with a shortage of consumers' goods) they could not spend to advantage, brought in additional billions of dollars, year by year. Further billions were set aside (that is to say, not used in buying goods) through private savings of other kinds. But even after the public had surrendered portions of its money income in the ways we have mentioned, there remained in its possession larger amounts than were sufficient to buy the available civilian goods at stable prices; and this excess, which is usually called the "inflationary gap," tended to cause trouble by raising the price level. The need for price control, in the form of "price ceilings," was recognized in the early days of the war, and led to the passage of the Emergency Price Control Act, which became law in January, 1942.

The Nature of Price Ceilings. Stated briefly, this law provided that the prices of virtually all commodities and a great many services be "frozen" as of March, 1942. Foods of most kinds, clothing, fuel, furniture and furnishings, hardware and agricultural supplies, rents, and many other types of goods (both material and non-material) were included in the thousands of articles covered by price ceilings. In the case of "cost of living" items, which comprised important articles in the budgets of families in the low- and middle-income groups, the maximum prices had to be publicly posted by the seller for the protection of the buyer. Additional powers of control over individual prices were granted under the Anti-Inflation Act of 1942 and a number of Executive Orders issued by the President.

We cannot take space here to deal with the countless problems which arose in connection with attempting to administer price-ceiling control on so extensive a scale. There were difficulties, in some cases, of determining what the maximum prices should be. There were instances of unintentional violation of the law. There were deliberate violations by selling in the black market at higher than ceiling prices, and by reducing the quality of a given good while maintaining the old maximum price of a better article. There was, in 1942, the necessity of freezing wages, for it became clear that it was grossly unfair to stabilize the selling price of a good while the cost of production was rising by reason of wage increases. There were instances in which it was necessary to grant price increases or wage increases in given industries if they were to continue to function; and other instances in which sellers were required to hold to the maximum prices, but were granted governmental subsidies to enable them to stay in business.

The Success of Wartime Price Control. It is quite impossible, of course, to isolate the several elements which constituted our wartime price-control mechanism and to determine how well each element served its purpose. However, the clear fact is that the combined efforts of all of the controls that were employed brought surprisingly satisfactory results. The wholesale commodity price index number (1926=100) of the United States Bureau of Labor Statistics rose from 77 in 1939 to 106 in 1945, as against a World War I rise from 68 in 1914 to 154 in 1920—or a price rise of 29 points in World War II and 86 in World War I. Even more impressive was the showing made after 1942, the year that price control was adopted seriously; for the wholesale commodity index rose only 7 points from 1942 to 1945, when production, and hence the volume of purchasing power in the country, were making new high records.

An examination of the cost-of-living index (1935-39=100) shows a greater advance in prices. This index rose from 116 in May, 1942, when price control went into effect, to 133 in June, 1946, and it is probable (as has been charged by union leaders and others) that an accurate comparison of both quality and price would indicate a much larger increase. Nevertheless, on the evidence that is available, it may be said that the operation of price controls kept prices fairly well in hand during the years of actual combat in World War II and for several months after the fighting ended.

Post-War Price Controls. As was to be expected, the surrender of Germany and Japan brought demands from a number of industrialists and several strong business associations that price controls be abolished as of June 30, 1946, the date of expiration of the law under which the controls were authorized. It was urged that, with the war successfully concluded, it was high time to remove all restraints to production and to the right to set prices at whatever figures the traffic would bear. The typical argument of these opponents of price control was the one widely publicized by the National Association of Manufacturers.⁷ The gist of this argument, presented in the N.A.M.'s own words as it appeared in hundreds of full-page newspaper advertisements, was as follows:

"ISN'T THIS THE ANSWER? NAM has said: Remove price controls on manufactured goods and production will step up *fast*. In a survey of a representative cross section of NAM membership, 97% find price controls are hampering production. Remove these controls and goods will pour into the market. Within a reasonable time, prices will adjust themselves naturally—as they always do when production goes up—in line with the real worth of things. This is the way you can get the goods you want at prices you can afford to pay."⁸

⁷ The costliness of such a campaign is indicated by the fact that the N.A.M. stated, at one point, that it had spent \$400,000 in advertising its views on price control. It was later estimated by others that anti-O.P.A. advertising had cost the N.A.M. a total of not less than \$700,000.

⁸ *The New York Times*, April 19, 1946.

This question was answered with an emphatic "No" by a substantial number of business men, most professional economists who expressed an opinion, and an estimated 600,000 private individuals who wrote or telegraphed their Senators to support effective price control, after the House of Representatives had passed, early in 1946, a bill extending the life of price-control legislation for nine months but with amendments which rendered it practically powerless.

Described in economic terms, the situation in which the country found itself in the first half of 1946 was as follows:

1. There was an unprecedented shortage of goods of many kinds, goods which people had long wanted to buy, and which (in certain demonstrable cases) were being withheld from the market by sellers in anticipation of the removal of price controls on June 30, 1946.
2. There was also an unprecedented volume of liquid assets in the hands of individuals and business concerns, totaling some 226 billion dollars.⁹
3. In addition to these liquid assets already in existence, account had to be taken of the new money income that always accompanies new production, which in 1946 was being created at the rate of some 150 billion dollars a year.

The advocates of continued price control insisted that this was an economic setup which, in the absence of *direct* price controls such as those administered through the O.P.A., would almost necessarily give way to disastrous inflation; that inflation not only would work hardship on millions of families in the low- and middle-class income groups, but might lead to the prompt conversion of war bonds into cash, which would in turn be spent as promptly as possible to avoid further losses through later price spiraling; that union workers, seeing their real incomes whittled down by rising prices, would stage strike after strike for more pay; that the abnormally high profits accruing to business men in periods of rising prices would result in undue expansion of plant (which the Federal Reserve Board could not prevent, in view of the nature of the country's war financing); and that this feverish prosperity might give way to the greatest depression in our history, because it would follow the country's biggest business boom—the outcome, in turn, of the unrestrained spending of more money and credit than this country had ever before amassed.

Answering the specific question posed by the N.A.M. and its colleagues, the champions of the extension of price control urged that the O.P.A. should be continued, with its power to keep price ceilings on individual commodities and services until such controls could safely be removed—that is to say, until production had sufficiently caught up with demand,

⁹ *Federal Reserve Bulletin*, February, 1946, p. 123.

in the case of a given good, so that the ceiling could be removed without the price skyrocketing. They held that if, as the N.A.M. wished, price controls were removed *first*, the prices of goods would almost certainly leap forward so promptly and so far that production would have little chance of overtaking them. They argued that announcement that price controls would be retained as long as they were necessary would lead hoarders of goods to abandon their "sellers' strike" and throw their stocks of withheld goods upon the market. They expressed the belief, in general, that practically all ceilings could be safely removed within a year, but that the O.P.A. should not be obligated to remove the ceilings in the cases of those goods which, if released from control, were fairly certain to experience extensive rises in price.

The Desirability of Post-War Price Control. Freedom from economic restrictions, except such restraints as may be necessary to safeguard the public welfare, is one of the cardinal principles of a capitalistic system. This is particularly true of restrictions placed upon the price mechanism—a fundamental characteristic of capitalism, which, it will be remembered, is often called "the price system." Hence, it is our view that there is no place in our capitalistic economic society for price controls of the O.P.A. type in *normal* times. But the first six months of 1946 were so clearly abnormal that, among academic economists at least, it seemed extremely hazardous to abandon price ceilings and look to the "free market"—which had not yet been restored—to provide fair, safe prices. Nevertheless, the Congress modified the price control legislation so greatly that the President decided that it was unworkable, and in late 1946 removed all controls except those relating to rents and a very few commodities.

It is now evident that goods did not "pour into the market" with sufficient speed and in sufficient volume to prevent a rapid and substantial increase in general prices. By November, 1947, the cost of living index had reached the all time "high" of 164.9 (1935–39=100), and gave no signs of subsiding. The extent of the 1946–47 price rise and the subsequent development of considerable "buyer resistance" caused a good deal of anxiety even among those who had been most enthusiastic about the removal of O.P.A. controls, and who finally in some instances began to suspect that the soaring price level would indeed lead to depression, or at least to "recession."¹⁰

American experience with wartime prices indicates that inflation is more likely to come *after* than *during* a war; and our experience following World War I suggests that inflation is likely to end in depression, as it did in 1921–22. In the interests of avoiding such dire consequences, the

¹⁰ "Even the National Association of Manufacturers, who had seen no danger of a wild price rise when the N.A.M. was axing O.P.A. to death, was now worried. N.A.M. President Earl Bunting gloomed: 'If the constant upward winding of the spiral continues, you'll see one of the most terrible busts this country has ever had.'" (*Time*, April 7, 1947, p. 85.)

price controls required in a modern war should, we believe, be continued for a time after the cessation of hostilities. However, these controls should be *selective* rather than *general*, being applied only to such economic goods as are abnormally scarce; prompt and sympathetic consideration should be given to "hardship" appeals, though without a guaranty of prices that would cover costs plus a "reasonable profit" (which would render the program unworkable); and the control agency should make a point of removing the ceiling price from each good just as soon as it seems clear that public injury will not result.

Conclusion. We must not close this discussion without noting the fact that some extremely able financial experts doubt the desirability of attempting to control the general price level (because of economic disturbances which might result from such an attempt) and, further, seriously question the ability of the Board of Governors, or similar agency, to bring about a stabilization of general prices. On these two points, then, the final word has not been written. We cannot undertake, within the limits of a single chapter, to examine further the first of these two points. As to the second, it seems unlikely that we shall know definitely whether stabilization can be effected by the Board of Governors until we have given this body specific authorization to make the attempt, over a period sufficiently long to provide a fair trial. This we have not yet done.

1. Distinguish between individual prices and general prices.
2. What is the purpose of price index numbers?
3. How and why are price index numbers weighted?
4. Distinguish between a *general* index and a *wholesale commodity* index.
5. What types of price index now compiled by the United States Bureau of Labor Statistics are referred to in the text?
6. What is the relationship between a general price index, and an index of purchasing power, such as those presented in Table 41?
7. How did the purchasing power of the dollar in 1915, 1920, 1925, and 1939 compare with its purchasing power in 1926?
8. Write the equation of exchange, and explain the significance of each factor in the equation.
9. Demonstrate arithmetically that a doubling of the quantity of circulating media (other things remaining unchanged) will cause a doubling of the price level.
10. How does the introduction of credit affect the equation of exchange?
11. What is the Quantity Theory of Money?
12. What historical evidence have we that changes in M and M' may be responsible, in large measure, for changes in price levels?
13. "High prices and low prices are equally harmless, if only one or the other, once adopted, will 'stay put.'" Explain.

14. "Gains and losses are likely to occur whenever there is an extension of credit over a period of years." Why?
15. If a person borrows when prices are low and repays when prices are high, does he gain or lose by the change in price levels?
16. What are the effects of general price changes upon persons who are dependent upon fixed money incomes?
17. "Prices take the elevator while wages climb the stairs." Explain, in connection with price levels.
18. Is the "wage earner" or the "salaried worker" the more favorably situated when general prices are rising? When they are falling?
19. Are "business men" more likely to welcome rises or declines in general prices? Why?
20. What was the specific purpose of the "market-basket plan"?
21. Give a brief description of this plan.
22. What difficulties might arise in the operation of the market-basket plan in the event of extreme changes in prices, either upward or downward?
23. What is the central idea of the Multiple Standard of Deferred Payments?
24. Outline Professor Fisher's plan for stabilizing the dollar, and explain how, presumably, it would operate.
25. What, if anything, could the Board of Governors of the Federal Reserve System do to stabilize general prices?
26. What is there about a wartime economy which tends to lead to inflation?
27. What measures were taken by the federal government, in World War II, to "siphon off" large portions of the excessively large quantity of circulating media which was in the possession of the people of the United States?
28. Explain the nature of, and the need for, price ceilings in wartime.
29. Discuss the degree of success with which wartime price controls functioned in the United States during World War II.
30. What are the chief arguments *for* and *against* the continuance of price controls in a post-war period? Examine these arguments in the light of your knowledge of the nature of price fluctuations and their consequences.

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Business Cycles

IN OUR EXAMINATION OF THE PURCHASING POWER OF MONEY IN THE PRECEDING chapter, we noted that general prices sometimes undergo extensive changes over a period of years. We shall see in the present chapter that there are fluctuations in business activity as well as in price levels. Indeed, the two are not unrelated; but our present concern is not so much with fluctuations in prices as with changes in economic activity. Changes of the type which we shall discuss are usually called business cycles.

THE NATURE OF THE BUSINESS CYCLE

"Business cycles are a species of fluctuations in the economic activities of organized communities. The adjective 'business' restricts the concept to fluctuations in activities which are systematically conducted on a commercial basis. The noun 'cycles' bars out fluctuations which do not recur with a measure of regularity."¹ This statement by a well-known authority is a satisfactory definition of business cycles, but it does not profess, of course, to be a description of these economic fluctuations. The nature of business cycles may be explained most clearly through the use of a chart indicating changes in industrial production.

A Chart of Business Activity. In Fig. 42 we have a graphic presentation of the business cycle as it is reflected in changes in the volume of industrial production.² Production may be counted upon ordinarily to increase in volume from year to year because of the demands of increased population. This growth is shown in Fig. 42 by a gradually rising broken line curve which shows that, on the whole, business activity has been increasing during the past thirty-five years. Had productive activities of the kinds here represented not experienced sharp fluctuations between 1913 and 1947, this trend curve would represent with a fair degree of accuracy the steady, continually growing volume of business transactions.

But a smooth, slowly ascending curve does not picture truly the productive activity of 1913 to 1947, or of any other reasonably long period, for that matter. For experience shows that business activity fluctuates from

¹ Wesley C. Mitchell, *Business Cycles*, New York, National Bureau of Economic Research, Inc., 1927, p. 468.

² Based on data of the Federal Reserve Board.

the general trend, now greatly and again but slightly. The extensive fluctuations, as we have said, are called business cycles. Referring to our chart, we note that, during this thirty-five year period, industrial activity shifted a number of times from one side of the trend curve to the other. These are the shifts that constitute business cycles. History has repeated itself since the post-1929 depression, for the curve of actual production (which in 1932 was well below the trend curve) in 1943 again went far above this trend curve of production.

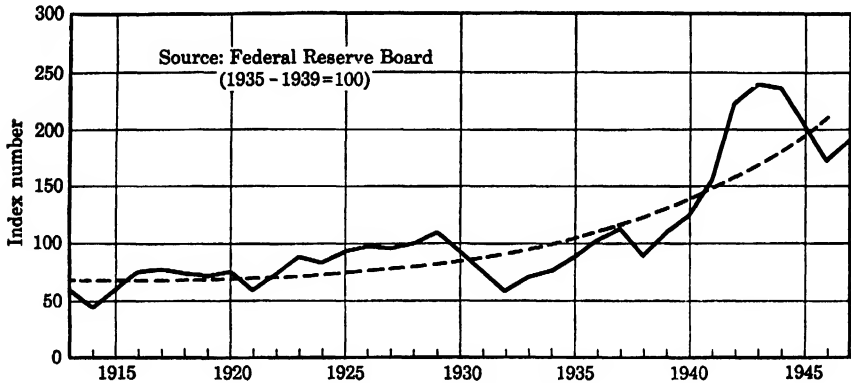


FIG. 42. THE BUSINESS CYCLE

This chart shows fluctuations in business from 1913 to 1947, as indicated by a curve based on indexes of industrial production for these years.

Length of the Business Cycle. Fluctuations in productive activity are sometimes great and sometimes small. There may be, in a single year, a number of minor fluctuations that cannot readily be shown on a small chart. Changes of this kind are of relatively slight significance. The business cycle proper covers a longer period than a year, and such fluctuations in business activity are much greater than those of any single year. The word "cycle," which has been so widely adopted in designating this particular economic phenomenon, suggests not only (as is stated in our definition) that the fluctuations recur with a measure of regularity but, further, that there is a return to a position of business activity previously occupied.

Our chart shows, for example, that production was at a low ebb in 1914. Then came a rise in activity which in two years took production above the trend curve. Following this spurt of productivity, there were several years of minor fluctuations, with a serious slump in 1921 from which business did not recover fully for almost two years. In this recovery, however, a new height of business activity was reached by the middle of 1923. Business was good from 1923 to 1929, with the exception of rather minor depressions in 1924 and 1927, which are indicated by the decline of the production curve in those years. The peak reached in 1929 represented a new "high" for

productive activity in the United States. Close upon this banner year came the post-1929 depression. The volume of production in 1932 was only about one-half as great as in 1929, but it then proceeded to increase steadily, except for the year 1938, until it reached the all-time peak in the war year of 1943, after which it suffered a decline when the abnormal wartime demand for goods subsided.

Thus we can see, without following further in detail the curve showing actual production during this thirty-five-year period, that the business cycle moves in wave-like motions. Not only does production tend to "come back" after it has suffered a recession, but the tendency is normally to strike a new high level of productive activity. This new level, we may once more note, is attributable largely to growth in population, but in part also to increases in individual demand which presumably represent improvements in standards of living.

"Periods" of the Business Cycle. It is customary, in describing the business cycle, to refer to several well-defined periods or phases which appear to accompany these wave-like changes in business activity. They may be listed as follows:

1. The period of prosperity.
2. The period of liquidation.
3. The period of depression.
4. The period of recovery.

TABLE 42. CHARACTERISTICS OF THE BUSINESS CYCLE

	Period of Prosperity	Period of Liquidation	Period of Depression	Period of Recovery
1. Industrial activity.....	Maximum	Decreasing	Minimum	Increasing
2. Prices.....	High	Falling	Low	Rising
3. Employment.....	Maximum	Decreasing	Minimum	Increasing
4. Wages.....	High	Falling	Low	Rising
5. Strikes.....	Many	Many	Few	Increasing
6. Business failures.....	Few	Increasing	Many	Decreasing
7. Bank deposits.....	Large	Decreasing	Small	Increasing
8. Bank reserves.....	Low	Increasing	High	Decreasing
9. Interest rates.....	High	Falling	Low	Rising

We shall examine these periods briefly, describing the effects of each upon industrial activity, prices, employment, and other elements that go to make up economic life. Table 42 is virtually an outline of this description, since it gives in tabular form the characteristics by which the periods of the business cycle are marked.

The Period of Prosperity. The period of prosperity is one of great industrial activity. Prices are high and stocks of goods, called forth by the inducement of high profits, are large. In the period of prosperity there is plenty of employment for workers, and wages are naturally high. Never-

theless, strikes are not unusual in this phase of the business cycle, since the workers, knowing that labor is relatively scarce and that business men are doing well, are likely to insist upon wage increases. Business failures, of course, are at a minimum, for this is a time when business men of even ordinary ability can make good profits.³

The items thus far mentioned relate to the manufacturing and commercial side of business, as contrasted with the financial side. So far as finances are concerned, there is a great expansion of bank credit during the period of prosperity. On this account, bank statements are frequently unsatisfactory; that is, they show small reserves, owing to the fact that banks have expanded credit greatly in response to the demands of business men. Because there has been a large expansion of credit and bank reserves are low, interest rates are usually high in the period of prosperity.

The Period of Liquidation. The period of liquidation is very unlike the period of prosperity upon which it follows, sometimes with appalling suddenness. In this phase of the business cycle, industrial activity is definitely curtailed and on the downward trend. Stocks of goods that have piled up during the preceding period are larger than can be disposed of readily, and as a consequence prices decline. For the same reason, and sometimes for other reasons which will be explained later, there is likely to be a good deal of unemployment. Unemployment means falling wages, since it permits the employer to replace present workers with others at lower figures, if employees will not take wage reductions. Nevertheless, workers, in the effort to maintain their wage scales, are not unlikely to go on strike to resist wage decreases, so that strikes are numerous in this period. Business failures are, of course, much more common in times of liquidation than in times of prosperity, and over a considerable stretch of time they become increasingly numerous. This, of course, is as we should expect it to be, for the period of liquidation is "settling up" time, when concerns that cannot meet their obligations are forced into bankruptcy.

Turning to the financial side of business, we find that bank credit is in process of contraction in periods of liquidation, since there is a tendency on the part of banks to call in their loans. This means increasingly larger reserves in the possession of the banks, so that bank statements are more satisfactory than in the period of prosperity. Because of the demands of business concerns for credit and the hesitancy shown by banks in extending credit at this time, interest rates are likely to be high, though in the process of falling.

The Period of Depression. Following industrial crisis comes the period of depression, during which industrial activity is at its lowest ebb. Because there is a small demand for commodities, prices of goods also are at their

³ But even in periods of prosperity, the number of business failures is startlingly high, as may be seen by reference to figures given in chap. 10 (vol. 1).

lowest. Since the demand is so slight, merchants and manufacturers are able to fill orders from stocks of goods which have been held over from the previous periods, and these stocks are depleted but slowly. The absence of extensive orders and the existence of sufficient stocks on hand make it unnecessary to keep industrial plants running, and as a consequence there is much unemployment.

Employers find it possible, during a period of depression, to force workers to take reductions in wages. Though there is a temptation to resort to strikes in order to resist wage reductions, the workers who have employment, realizing the weakness of their bargaining position and anxious to retain their jobs, usually accept whatever terms are offered by the employers; hence there are few strikes in time of depression. This is a most difficult period in which to conduct business. Some of the less capable enterprisers are unable to survive this trying period, and business failures are numerous.

Since business is simply marking time, there is little call for bank credit, and borrowings by business men are at a minimum. Former loans have been repaid, and bank statements are favorable, showing large reserves in relation to the amount of credit outstanding. The existence of these large reserves makes bankers eager to place loans, and this eagerness is manifested in low interest rates. But despite their willingness to use their resources profitably, the bankers often exercise in the period of depression an excess of caution with respect to eligibility of loans, which prevents borrowing by those who could use bank credit legitimately and advantageously. This undue caution is a hang-over from the period of liquidation, when banks have found it difficult and oftentimes impossible to collect the amounts due them.

The Period of Recovery. Business depression fortunately cannot last forever, but gives way to a phase of the business cycle known as the period of recovery. The wheels of industry begin to turn once more, in order to make goods necessitated by the depletion of stocks which have gradually been purchased even in time of depression. Increased demand brings with it a rise in prices, and the prospect of good prices leads to industrial activity which soon results in a fair-sized stock of goods. Unemployment begins to disappear, since mines, mills, and factories cannot be run without workers. Wages, which had been low in the preceding period, show an improvement; and wage earners, glad to find steady employment once more, manifest but little disposition to call strikes at the outset of the period of recovery. However, strikes increase in number as business continues to improve and workers seek to regain the wage losses suffered during the depression. Business failures are much less numerous than during a period of depression; the number of bankruptcies declines steadily in this and the following period.

Now that business is improving, business men resume once more the

practice of borrowing, and there is an increase in bank credit. This means, of course, that the expansion of credit by banks appears in bank statements, and the reserve percentages decline steadily as loans increase in volume. Since bankers now have plenty of opportunities to lend out funds, there is no need to offer the inducement of low rates of interest; consequently, interest rates rise during the period of recovery because of the expansion of bank credit.

The cyclical nature of business fluctuations is indicated by the fact that the period of recovery is followed by a period of prosperity. Thus we are brought back to our original starting point; but the height of industrial activity in this return is likely to be greater than in the preceding period of prosperity. Referring again to Fig. 42, we may note once more the great irregularity in business activity indicated by the now-rising, now-falling curve of production. It is evident, however, that the level of industrial production reached in each period of prosperity is higher than that attained in the preceding cycle.

PROBABLE CAUSES OF THE BUSINESS CYCLE

The Problem of Explaining the Cycle. The frequency of occurrence and the general similarity of business cycles constitute the basis for believing that it may be possible to find a general explanation of the manner in which each peak of prosperity leads ultimately to crisis, and a new peak eventually begins to rise from the trough of depression. But it would be quite a different matter to secure general acceptance of any specific explanation. Business cycles cannot be studied in the laboratory, but must be observed in their particular historical context. Almost invariably there are certain random factors that are peculiar to any given historical period. Hence, it is easier to find an explanation for an individual business cycle in specific terms than in general terms.

The problem is further complicated by the common tendency to seek monistic interpretations and explanations of developments in any field of inquiry. As we have seen, the business cycle is related to prices, production, finance—in short, to most aspects of business activity. It would seem to follow that developments in any of these fields might in part explain the development of the cycle. Moreover, the psychological factor, as distinct from the economic, may play an important part in bringing about cyclical movements, and the political factor is assuming increasing importance. For these reasons, any monistic explanation must be suspect. Pluralistic explanations, on the other hand, run the risk of being so general in nature as to be either meaningless in terms of definite cause-and-effect relationships, or incapable of being verified with accuracy, or both.

Factors Influencing the Cycle. Business cycle theories by the score have been developed, each stressing a particular “cause” as being solely

or chiefly responsible for cyclical fluctuations in business activity. We are told that business cycles are caused by sunspots, rainfall, wars, discoveries and inventions, and changes in population; by overproduction; by underconsumption; by the instability of our money and credit system; and by undue optimism or pessimism on the part of business enterprisers.⁴ It is not possible for us to examine these many theories critically.⁴ And since any monistic theory would seem to constitute an oversimplification, it is probably best to restrict ourselves to a description of the operation of certain factors which appear to play a part in any satisfactory explanation. These include industrial, financial, and psychological conditions.

By *industrial* conditions, we mean levels of production, commodity prices, wages, profits, the volume of employment, and the degree of industrial unrest. Cyclical fluctuations are generally measured in terms of these conditions. The most important of the lot is probably the level of production, since the other conditions may be expected to vary primarily as a result of earlier changes in the volume of production. By *financial* conditions, we mean primarily the level of bank reserves and bank deposits, and the level of the prevailing rate of interest. By *psychological* conditions, we mean the degree of optimism or pessimism which exists among those who play an active rôle in the guidance and direction of production. It is unquestionably true that business cycles are not purely mechanistic in character. If undue optimism or pessimism characterizes the attitude of the enterpriser and the capitalist, business activity may expand in the face of structural weaknesses in the economic system, or decline to a low level when external conditions are apparently favorable for expansion.

The "Self-Generating" Theory: A Pluralistic Explanation of the Business Cycle. The crux of the problem is to ascertain what factor or factors are responsible for the transition from one period to another. This does not mean a mere enumeration of the consequences of such a change, once it has begun. Nor is it the same thing as listing the wide variety of developments which might affect the duration and extent of a movement in a given direction, once that movement has started. To speak of the beginning of a cycle, however, is a contradiction in terms, for a cycle (like a circle) obviously has neither beginning nor end, but is a continuous process. Therefore, we must break into the cycle at an arbitrary point, and seek to determine why the conditions then existing failed to continue indefinitely, and instead were transformed in such a way as to bring about a passage from one period of the cycle to the next. To attempt to work backwards is impossible, for in so doing we should inevitably be forced to make our way through an infinite number of earlier stages. We must start, therefore, at some arbitrarily selected point and work forward.

Prosperity and the Trend Toward Crisis. Admitting, then, that our selection of a particular point is arbitrary, let us break into a "normal"

⁴ They are dealt with in detail in Gottfried von Haberler, *Prosperity and Depression*. Geneva, League of Nations, 1937.

business cycle during the period of prosperity. This period, as we have noted, is one in which business is booming. It is, among other things, a time of progressively higher prices. Rising prices mean large profits for business men. Goods are produced in anticipation of demand, and if prices are increasing steadily, commodities may be disposed of at figures which are often considerably in excess of the costs of production. For the selling price of goods in a period of rising prices will tend to be the cost of production of such goods at the time at which the sale is made. This price may be considerably greater than the actual cost in a period of rising prices, since into the making of the commodity in question have gone raw materials and labor purchased some time before the sale of the finished good, and purchased therefore at relatively low prices. Moreover, interest charges, salaries, and certain other items of expense almost never keep pace with rising prices. The net effect of these conditions is that profits are large when prices are on the upgrade.

Since business men are anxious to reap these high profits, they make every effort to expand production in times of rising prices, and on this account stocks of goods, employment, and wages are usually at their height in a period of prosperity. The truth is that toward the end of this period the industrial bubble is about ready to burst. Expansion in the production of goods is matched by an expansion in financial activity. The one, of course, has given rise to the other, for bank credits are expanded to their limits only when business is or has been booming.

The psychological attitude during the greater part of the period of prosperity is one of optimism. Business men, since they are making large profits, are naturally optimistic. But there comes finally a time when this optimistic attitude may be assumed rather than real. Captains of industry sometimes whistle to keep up their courage. Though they wish for and talk much about continued prosperity, they begin sooner or later to be fearful that the peak of industrial activity has about been reached. They know from experience that business activity runs in cycles and that periods of prosperity are followed by industrial crisis and depression. With the boom fully expanded, and with doubt and uncertainty in the air, it sometimes requires only a slight jar to change the period of prosperity into one of industrial crisis and liquidation. Sometimes, as in 1929, this jar appears in the form of a crash in the stock market.

Crisis, Liquidation, and the Beginnings of Depression. It is possible that in one or more lines of manufacturing there has been too great production during the period of prosperity, owing to the desire of business enterprisers to make large profits while prices are high. There may be, for example, an overproduction of automobiles, or radio sets, or some other article manufactured on a very large scale. When sales fail to keep pace with production, the natural tendency is to curtail production. An over-supply of automobiles may easily result in the closing of the plants of

one or more of our leading automobile manufacturers. An action of this kind throws out of work many thousands of wage earners. Not only is the purchasing power of these workers reduced, with a consequent depressing effect upon other industries, but a move of this kind is interpreted by many other business men as a sign that the period of prosperity has come to an end.

Other manufacturers decide upon a curtailment of their productive operations. Merchants having large quantities of goods on hand offer them at lowered prices in order to reduce their stocks and obtain funds. Manufacturers, now unable to sell at former high prices, demand that workers submit to reductions in wages. In the effort to resist wage cuts, employees resort to strikes, and again purchasing power is curtailed. Bank credit, which had been stretched to the utmost, is now contracted, for bankers, in view of the unsatisfactory industrial conditions, are anxious to call in their loans. But business men find it difficult to meet their financial obligations as these loans are called. In their effort to secure the necessary funds, manufacturers and merchants sacrifice stocks of goods on hand, and offer to pay high rates of interest for loans which will tide them over the emergency. Despite their best efforts, many are unable to weather the storm, and go down in bankruptcy.

The mental attitude of business men during the period of liquidation and in the early stages of depression is naturally one of doubt and fear. Not knowing what the immediate future will bring forth, but looking forward to some months of poor business, they hesitate to put into execution whatever projects they may have had in mind during the period of prosperity; and this lack of action leads definitely to that state of inaction, sometimes long drawn out, which is known as the period of depression.

Depression and the Move Toward Recovery. This period, as we noted in an earlier description, is one which finds business virtually flat on its back. Tendencies which were apparent in the period of liquidation have been allowed to run their course, with the result that production has come almost to a standstill. The psychological atmosphere of the period of depression is one of extreme pessimism. With business in a state of suspended animation, no one seems to know just what steps should be taken to bring it back to life. And yet, if the self-generating theory is sound, it is in this very condition of business prostration that the causes which lead to the next phase of the business cycle, the period of recovery, must be sought.

Recovery and the Causes of Prosperity. It is probable that the starting point of revival is usually the exhaustion of stocks of goods. It may be that the surplus of automobiles, which we suggested as bringing to an end the period of prosperity, has slowly been disposed of, and that there is again a demand for cars which will be available only if automobile

plants resume production. An announcement from the Ford Company or the General Motors Corporation that operations are to be resumed and employment given to a hundred thousand men, would stimulate activity in businesses of all kinds.

Such an announcement would appear to many to herald the turning point of the tide. It is the final word for which the less venturesome have been waiting. Enterprisers throughout the country again take heart, and factories here and there resume operations or, in some cases, go on "full time" after a period of curtailed production. Workers are available at low wages at the outset of this period, materials may be had at bargain prices, and banks, because of their large reserves, are anxious to extend credit at moderate rates of interest. These particular advantages are likely to disappear as the revival of business makes considerable headway. That is to say, wages increase, interest rates rise, and other expenses advance as production assumes normal proportions. However, the attitude of business men is now one of increasing courage and optimism as regards the future. It is felt that the "slough of despond" has been passed, and that the months ahead hold bright prospects.

The process of recovery may be a relatively slow one, but in the course of a year or so machines are once more humming and the business cycle passes by almost imperceptible steps into the period of prosperity. Thus we find that in each of these several phases of the business cycle are the conditions which almost inevitably bring about the succeeding phase.

THE STABILIZATION OF BUSINESS ACTIVITY

Desirability of Stabilization. Every period of depression means bankruptcies, unemployment, idle resources, want, and suffering. The desirability of introducing stability into economic activity, for the purpose of eliminating, or mitigating, the catastrophic consequences of recurrent depressions, would seem scarcely open to question. However, reliance upon pure automaticity, as opposed to conscious control, would necessitate the rejection of deliberate attempts at stabilization. It might be argued that the depression represents a painful but necessary period of cleansing for the economic system. Inefficient producers are driven out of business, and only the efficient survive. The expansion of production which ultimately follows the contraction of depression finds the productive agents reallocated, to a certain extent, in the interests of greater efficiency and of maximum ability to satisfy changed and changing demands.

Viewed in this sense, the business cycle insures the survival of the fittest, and, because it constitutes a threat to producers, it serves as an added incentive to maximum efficiency in production and the greatest possible effort to direct production so as to accord with the prevailing public desires. Finally, the believer in unadulterated automaticity may

resort to the generalization that the cures attempted by any deliberate interference in the unhampered functioning of the economic mechanism will inevitably be worse than the disease which they seek to overcome. The implications inherent in such an attitude were noted in the preceding chapter. For the same reasons, we are again forced to reject this line of argument and to hold that any proposals which offer the possibility of achieving a greater degree of stability in our economic life merit our serious consideration.

The Significance of Proposals for Stabilization. We have given some indication of the complexity of the business cycle. We were forced to reject monistic interpretations of the phenomenon. Consequently, there is no reason to believe that proposals dealing with isolated factors can eliminate the cyclical nature of economic activity. Considered separately, the most that can be expected of the proposals discussed below is a diminution in the frequency and severity of continuing fluctuations. Any considerable degree of stability would probably require the simultaneous adoption of a number of devices. It should be clearly realized that no single measure, and possibly no combination of measures, is likely to provide a *complete* cure.

Cyclical Stability Through Price Stability. The effect of rising price levels, in stimulating too rapid an expansion of production during periods of recovery and prosperity, has been mentioned. Conversely, in the period of liquidation, falling prices force unduly rapid contraction. The way in which purchasing power may lag immediately preceding a crisis, because of the failure of wages and salaries to advance as rapidly as prices, has also been observed. It becomes apparent, then, that a plan of price stabilization might be used in an attempt to influence cyclical fluctuations. Hence, either of the proposals considered in the preceding chapter for stabilizing the general level of prices might be applicable also to the present problem.

There is no need to describe and analyze these proposals again. It would appear, however, that the most promising proposal for price stabilization in what may be called "normal times" is the intelligent use of the existing control over bank credit now entrusted to the Board of Governors of the Federal Reserve System. The potentialities of increased stability from this source are great. However, their successful application would require not only a high order of intelligence, but also the ability to resist public pressure. The achievement of stability would require the periodic use of measures for checking expansion. It is almost inevitable that both enterprisers and labor would vigorously resent and oppose governmental action that would be likely to limit the expansion of production and employment. If, however, control is to be effective, it must be applied before expansion has run its normal course and collapsed under its own weight. If the control of credit could be made to prevent undue expansion, the

necessity for the liquidation and contraction which lead to depression would never arise.

Stability Through Public Works. A second approach to the problem of stabilization centers around the maintenance of a reserve of public works projects. We have seen that, once the peak of prosperity has been reached, the initial steps in the direction of contraction lead to the creation of conditions which force further contraction. Specifically, contraction in even a single important field diminishes the available supply of purchasing power, and this decreases sales generally, and necessitates a reduction in production in a variety of fields. It is argued that if the government were to keep in reserve a large-scale program of needed public works, and begin to put the program into operation as soon as contraction in private business took place, the decline in purchasing power would be prevented and the spiral of contraction halted.

It should be noted that we are dealing here with a plan which is not to go into effect until the peak of prosperity has been reached and passed. There is abundant reason to suppose that any such peak represents an abnormally high level of activity, which probably ought not to be maintained by artificial means, and certainly could not be permanently maintained except through huge governmental expenditures which would eventually threaten the credit standing of the government. The chief value of expenditures for public works in connection with the business cycle would seem to lie in the possibility that they might prevent a panic, and promote instead an orderly and gradual contraction. To attempt to prevent any recession whatsoever from the peak of prosperity would appear to be unwise. Hence, the proposal under consideration seems more likely to work out successfully in limiting the severity of cyclical fluctuations than in decreasing the frequency with which such fluctuations occur. It should be clear that the peak of prosperity would not reach such dizzy heights if, in "good times," the government collected revenue in excess of its current needs, thus reducing somewhat the purchasing power that would otherwise be available for private spending; nor would the trough of depression reach such profound depths if, in "bad times," these surplus funds were expended on public works.

Stability Through Unemployment Insurance. Somewhat similar to the plan just described, because of its dependence on maintaining purchasing power, is the proposal to secure stability through the agency of unemployment insurance. The benefits paid to the unemployed from insurance funds would presumably take the place of the wages workers would be losing because of unemployment attributable to lessened production. Here, again, is an attempt merely to prevent the reaction from a business boom from becoming too serious; and the usefulness of this device would lie chiefly in its contribution to orderly contraction as an alternative to the panic of liquidation.

If we are to make expenditures for public works or pay insurance benefits to the unemployed, we must use care in selecting a sound method of raising the required funds. An unemployment program that aims to prevent the spread of a business contraction which has already entered its initial stages should not be financed by levying new taxes. For additional taxes would curtail private spending, and would merely change the direction of economic activity, and not increase its volume. Likewise, it would be futile to pay unemployment benefits from the receipts of current taxes. This financing should be done, rather, by public borrowing, on the theory that the situation is one of emergency, and for the reason that this borrowing will tend to increase the total volume of circulating media, and thus of purchasing power.

There is no good reason why unemployment premiums should not be collected in normal times, and the funds thus accumulated used to reduce the public debt, so that governmental credit and therefore borrowing power would be in excellent shape when emergency loans were necessary to provide funds for the payment of unemployment insurance benefits. Presumably, the financing of public works (advocated in the preceding section) would be done in essentially the same way—the public debt being reduced steadily with payments made from the surplus funds collected year by year, so that the government would be in a favorable borrowing position when it was necessary to build extensive public works in order to combat depression.

Stability Through Direct Action. It will be seen that the plans discussed thus far suggest an approach to the problem of stability. They propose that we aid in promoting stability in production through such devices as the manipulation of money and credit, a public works program, and contributions to purchasing power in the form of unemployment benefits. The *direct* approach would involve the establishment of production quotas, and the direct control of output in the interests of stability. Under present conditions, we have no choice in this country as between the direct and the indirect approach. The former would mean the violation of the institutions of freedom of enterprise, freedom of competition, and private property, which most Americans prize highly. The direct approach could be used only by the exercise of a much larger degree of governmental control over business than now exists in the United States.

The utilization of the direct approach must await, therefore, our decision as a people to embark upon a planned economy under the guidance of the state, should such a decision ever be made. Whether such a transition is desirable is a debatable question. It is highly probable that a fair degree of stability could be attained in a planned economy. But whether stabilization would take place at a level so low as to more than offset the advantages derived through the elimination of frequent fluctuations is an open question. Moreover, we have in the past succeeded in maintaining a

long-run *rising trend* of production, in spite of periodic fluctuations. It is possible that a rigidly controlled economy would tend to become static, substituting long-run stability for our present long-run expansion.

Among the characteristics of our present economic order are the following: A considerable degree of freedom of action for privately owned enterprises, with regard to price and production policies; rapid technological progress, resulting in frequent changes in the methods of production, and the continual development of new industries and disappearance of others; practically complete freedom of choice for consumers, with consequent frequent changes in the nature of demands; at least relatively free competition for the agents of production; and various legislative restrictions upon certain activities that are adjudged to be in restraint of competition. So long as these characteristics survive, it seems highly improbable that we shall succeed in eliminating the business cycle as a periodically recurrent phenomenon. But there is no need to accept the idea that we can do nothing either to mitigate the intensity and consequences of periodic contractions, or to check the unduly rapid expansion which seems to be the root of the difficulty. To adopt a defeatist attitude such as this would indicate an unwarranted lack of faith in human ability.

Reform, Relief, and Recovery. Though an ounce of prevention is said to be worth a pound of cure, societies often manifest more interest in solving problems after they have arisen than in preventing their appearance in the first place. This is certainly true of the specific problem of the business cycle. The business community in general worries but little, during the upward swing of the cycle, about the possibility that expansion may eventually get out of hand. Most of our concern over business cycles is reserved for the period of depression.

The consequence is that we tend to confuse three separate and distinct classes of proposals. There are, first, the measures of reform. These are attempts to increase the degree of stability in economic activity, and include certain plans that we have already discussed. Second are proposals for relief. These represent efforts to lessen the suffering and want that mark every period of economic stagnation. Third are devices aimed at bringing about recovery. Included in this class are all measures that are designed to increase economic activity. The measures directed toward bringing back recovery are temporary measures that have immediate objectives, and differ from the reform measures, which are permanent in nature and are aimed at long-run objectives. The situation is further complicated by the fact that there may be a considerable amount of overlapping among these three types of activities.

In the period which immediately preceded the crisis of 1929, little concern was manifested in fluctuations in economic activity. The era was characterized by an almost unprecedented optimism and a widespread belief that business depressions were phenomena of merely historical

interest. But with the stock market crash of that year came disillusion, and our actions in the depression years provided a striking example of simultaneous attempts at reform, relief, and recovery. This was particularly true of the period following 1933, for the federal administration in power prior to that date had based its policy on the assumption that the economic structure was fundamentally sound, and that little, if anything, in the way of reform was needed.

Governmental Attempts at Stability Since 1929. It is well to note that, though political agencies in this country seldom hold the power to control economic activity directly, nevertheless it is to these agencies that we must turn for the initiation of any extensive measures that may be indicated for achieving either economic reform or business recovery. When faced with disequilibrium throughout the entire economic system, we cannot rely on the efforts of individual enterprisers to restore normal conditions. Action on an industry-wide basis, through trade associations or labor organizations, is only slightly less futile, (1) because of the high degree of interdependence between industries, and (2) because "cooperation" between business men is so likely to take the form of price-fixing through restriction of production.

Governmental attempts to remedy the situation that existed between 1930 and early 1933 consisted in large part of expressions of confidence in the fundamental soundness of our institutions and appeals to employers to maintain employment and wages. Regardless of whether our enterprisers saw the social desirability of following this advice, the situation was such that they could not afford to do so in the absence of a governmental program directed toward insuring a general maintenance of purchasing power.

The Roosevelt Stabilization Program. With the inauguration of the Roosevelt administration in 1933 came the beginning of the most vigorous program of reform, relief, and recovery with which the United States has ever undertaken to combat a business depression. We may outline this program briefly at this point, though many of its specific features are described elsewhere in this volume.

As we have said, it is often hard to distinguish clearly between relief and recovery measures. However, we may consider as predominantly "relief" measures certain agencies that were established (1) to provide loans to distressed debtors and (2) to promote public works. Among the first was the Reconstruction Finance Corporation, established during the Hoover administration. Its task was to make loans (1) to banks that were fundamentally sound but in temporary difficulties; (2) to the several states for use in relieving unemployment; and (3) to corporations on the verge of bankruptcy. The Farm Loan Corporation was established to provide credit to farmers; and relief to home owners was extended through the Home Owners' Loan Corporation. These three agencies unquestionably aided in mitigating the suffering which inevitably accompanies a period

of depression. They served the further desirable purpose of retarding the rate of liquidation.

The public works program inaugurated by the Roosevelt administration was unprecedented in its scope. Several billions of dollars were appropriated in each of a number of years, for carrying on this program of public construction. The desirability of planning public works in advance soon became apparent, for the program was slow in getting under way because adequate plans had not been prepared. Further delay was caused by a dispute over the relative merits of long-range planning and the building of works of lasting usefulness, as contrasted with engaging in a host of unrelated projects in which wages for labor would be the predominant cost. From the point of view of economy, the extensive adoption of the second of these policies was probably unfortunate.

While loans and expenditures for public works may halt a downward trend, action of a sterner character is required to promote positive revival. Hence, the Roosevelt administration experimented with a variety of measures dealing with monetary matters. The general program has been termed "controlled inflation." The President was granted power to reduce the gold content of the dollar, to issue large additional quantities of "greenbacks," and to increase the quantity of silver in the monetary system. The object of these devices was, apparently, to raise the general level of prices, and this in turn was expected to lead to increased productive activity, for reasons which were discussed in the preceding chapter. However, this stimulus to price rise was offset, to some extent, by difficulties experienced in effecting an expansion in bank credit, over which the government had no direct control. These difficulties led to renewed demands, in certain quarters, that the government be given control over all agencies for the creation of credit. Whether this would or would not be desirable, it is certain that price control can be made genuinely effective only through the regulation of both money and credit, and not of money alone.

A further attempt to aid recovery took the form of trying to increase the incomes, and thereby the purchasing power, of wage earners and farmers. The National Industrial Recovery Act sought to increase wages and decrease unemployment by reducing the length of the working week. The cooperation of employers was secured by granting them, through the codes established under the Act, the right to impose limitations upon price competition, and in some cases upon the volume of production, within a given industry. The Agricultural Adjustment Act sought to increase farm incomes by raising the prices of agricultural products. This was to be done by reducing crop acreage. Both of these Acts are open to criticism on the ground that they embodied a general policy of curtailed production. As a long-run objective, such curtailment has no economic justification. As an emergency measure, it seems a highly dubious method of getting back to either a high level of employment or a large volume of

industrial production. Further, both measures revealed the difficulties of governmental efforts to influence economic activity, when the government has little or no power to control prices.

It is probable that the N.I.R.A. prevented wages from falling to as low a point as they would have reached had no such device been adopted. However, far from insuring against the possibility of prices increasing at a more rapid rate than wages, the Act practically invited such a wage lag. Hence, it contributed little to the real income of industrial workers. The restrictions on production embodied in many of the codes likewise offset the increase in employment which might otherwise have resulted from the undeniable reduction in hours. The increases in the level of industrial commodity prices also offset, to a considerable degree, the benefits of the increased money incomes that accrued to farmers through the operation of the A.A.A.

The Supreme Court ruled that both of these Acts were unconstitutional. However, in the field of agriculture, the Agricultural Adjustment Act of 1938 provided an essentially similar farm measure. This Act is dealt with in our discussion of agriculture.⁵ The N.I.R.A. has not been replaced, but the Fair Labor Standards Act of 1938 provided for increases in the money incomes of industrial workers whose wages were strikingly low.

In the field of "reform," the Roosevelt administration adopted the following measures: (1) The passage of legislation increasing the powers of the Federal Reserve System; (2) the establishment of the Securities Exchange Commission; (3) the attempt to improve industrial relations as outlined in the Wagner Act; (4) the inauguration of a comprehensive program of social insurance. What will be the effects of these measures upon business stability in the future is a matter of speculation. It would appear that the possibilities of checking an undue expansion of business before it has attained dangerous proportions have been increased. It would also seem probable that the widespread payment of unemployment benefits will act as a brake upon the downward trend of purchasing power in periods of contraction. There is, however, no reason to believe that the problem of economic instability has been solved to any appreciable extent. It must be borne in mind that many governmental measures adopted in the post-1929 depression were designed to meet emergency conditions of that particular period of "hard times," and might not be applicable to another, and different, depression.

THE THEORY OF FULL EMPLOYMENT

We must not close the present chapter without discussing briefly a program for combating depression that has won many adherents among economists and others, more particularly since 1936 when the late Lord

⁵ Chap. 45.

Keynes published his now famous work, *The General Theory of Employment, Interest, and Money*.⁶ In this book, Keynes presented the results of a study of unemployment which had been engaging his attention for some years.

The Keynesian Approach to Unemployment. The "Keynesian approach" to the problem of business depression, and the unemployment which inevitably accompanies it, may be described in a greatly simplified form, as follows: Production of the commodities and services which are turned out in a given period involves the expenditure of sums of money in the form of costs of production. To the persons to whom the payments are made, this *expenditure* constitutes *income*. Furthermore, the amount of expenditure and the amount of income are necessarily equal, for what is expenditure to the payers is income to the receivers. If all of this income is spent promptly, it will provide the funds for financing an equal amount of production in the *following* period—and this is true regardless of whether it is spent for consumers' or producers' goods. If more than this amount is spent, having been added to from other sources, production in the ensuing period will be stimulated. But if less than the total income is expended, through hoarding or some other type of withholding of purchasing power, production will be depressed, it will reach a smaller total than in the previous period, and unemployment will result.

"Offsets" to Savings. We saw, earlier in the chapter, that depression follows close upon the heels of cumulative prosperity, which means that a high level of employment and income gives way to a low level of both employment and income. The Keynesians maintain that the business boom, which brings a rise in national income, brings increases also in most individual and family incomes, and that, under these conditions, "billions of dollars . . . are saved each year because people have incomes in excess of their consumption needs, because of a desire for personal security, because of power considerations or greed, because of automatic institutional arrangements, and for a thousand other reasons. It is irrelevant whether the process is deliberate or unconscious, whether prudence and thrift are involved or greed and lust, whether or not there is pain and abstinence. The desire to accumulate is a social *fact*, to be taken as such. And whatever might or might not be true of a Robinson Crusoe economy, it is clear that in modern societies individuals save regardless of the magnitude of investment outlets. Even if no new securities were floated, attempts to save would continue; and if old securities were not available, it would still be possible to accumulate non-interest-bearing assets in cash."⁷ It must be remembered, of course, that in addition to individual and family sav-

⁶ John Maynard Keynes, *The General Theory of Employment, Interest, and Money*. New York, Harcourt, Brace & Company, Inc., 1936.

⁷ Paul A. Samuelson, in *Postwar Economic Problems* (Seymour E. Harris, ed.), New York, McGraw-Hill Book Company, Inc., 1943, pp. 36, 37.

ings are the savings of business enterprisers. It is the withholding of *all kinds of savings* from the expenditure stream that leads to a reduction in production and an increase in unemployment, unless these savings are offset in some way. The normal offset to savings is investment by the savers or their agents; but in the absence of adequate private investment other offsets must be found.

Granted that large sums out of the total income that was produced in the preceding period are withheld from current expenditure, it would seem to follow that the deficit must be made up if the volume of forthcoming production is not to decline. It is the failure to make up this deficit that turns prosperity into depression, and full employment into unemployment. To insure the continuance of full employment, and the avoidance of depression when total expenditure for consumption and investment is inadequate, other funds must be found which will offset the amounts saved, and thus bring the total amount expended up to its former high level. Only in this way can production, and consequently employment, be kept from declining. Though there are a number of possible offsets to these savings,⁸ the one that bulks largest in the program of the Keynesians is governmental spending.

The Government's Rôle in Providing Full Employment. Up to this point, we have purposely omitted any mention of governmental spending, though it is obvious that expenditures by government often play a very important part in stimulating or maintaining production and employment, and it is in governmental spending (national, state, and local) that the Keynesians find the remedy for oversaving. We have seen that income, once received, may or may not be returned promptly to the expenditure stream. It is proposed that, whenever there is a deficit in expenditure such as we have described, the government shall undertake (through its taxing and borrowing power) to supply the funds that are required to bring the total expenditure up to the amount needed to provide full employment.

This does not mean that the government itself would go into business by becoming a producer of goods, but rather that it would finance the purchase of desirable goods on a sufficiently large scale to take up the slack which would otherwise result from the failure of a considerable portion of the *income* to be converted promptly into *expenditure*. "Private business can and will do the job of production," says Professor Hansen, a prominent advocate of governmental spending for the maintenance of employment. "It is the responsibility of government to do its part to insure a sustained demand. We know from past experience that private enterprise has done this for limited periods only. It has not been able to insure a continuous and sustained demand. The ever-increasing gigantic powers of production of the modern industrial system, far exceeding those of any earlier experience in history, mean that an enormous output has

⁸ *Ibid.*, pp. 40-46.

to be reached before full employment is approached. Private industry and government together must act to maintain and increase output and income sufficiently to provide substantially full employment."⁹

The Meaning of Full Employment. Some opponents of governmental spending to provide work have debated at considerable length the meaning of "full" employment, and argued that even in periods of peak production there has always been and will continue to be some unemployment. We have been reminded that there are unemployables, who either are incapable of doing work that the world wants done or for temperamental or other reasons simply find it impossible to hold jobs; and that among our able workers some are always out of work by reason of seasonal or technological unemployment while others are in process of moving from old to new jobs, and are for the moment unemployed.

It is only fair to say that the Keynesians do not pretend to prescribe for unemployment of these kinds, which may on the average affect a million or more workers annually, but for the prolonged and much more deadly economic ailment of cyclical unemployment. One writer, in what seems to us a sound interpretation of the term, defines full employment as "a condition under which every person who is able and willing to work can find enough employment in the course of a year to earn not less than enough to maintain his habitual standard of living."¹⁰ The problem, then, becomes one of preventing the recurrence of business depressions, with their burden of involuntary idleness on the part of persons of unquestioned ability who are obviously anxious to find work. To avoid fruitless controversy over the impossibility of achieving *full* employment, when the term is interpreted literally and rigidly, some writers have adopted the practice of using the expressions "substantially full employment"¹¹ and "reasonably full employment."¹²

What Might the Government Buy? Critics of this kind of program frequently cite the governmental expenditures of the post-1929 depression as evidence, first, that such spending is very wasteful, and, second, that it does not put a speedy end to a depression.

To the first of these contentions, the Keynesians answer that our governmental spending in the 1930's, so far as it was wasteful, was so largely because it was unplanned. Extensive, hastily executed projects for which detailed plans have not been drawn up in advance are pretty certain to be inefficiently carried out. The Keynesians hold that well-considered planning, which has reached the blueprint stage well in advance of the emergency, would give us an excellent chance to get "our money's worth" in return for whatever expenditure would have to be made in order to insure

⁹ Alvin H. Hansen, in *ibid.*, p. 14.

¹⁰ E. A. Goldenweiser, in *Jobs, Production, and Living Standards*, Washington, Board of Governors of the Federal Reserve System, 1945, p. 4.

¹¹ Alvin H. Hansen, quoted in the present chapter.

¹² *Fortune*, Supplement, December, 1942, p. 7.

full employment; and that the expenditure, moreover, could always be made for goods of which society stands in genuine need and of which we are unlikely ever to have an excess. Roads (including underpasses at railway crossings), more adequate educational institutions of all grades, enlarged hospital buildings with the most modern facilities, new housing for millions of families with small incomes—these are but a few of the “public” projects upon which national, state, and local governments might conceivably spend funds which, if not spent in these ways to avoid depression, would have to be expended in large measure for purely “relief” purposes.

It has been suggested, moreover, that there are many other types of expenditure which would pay large social dividends, over and above the prevention of depression (if, indeed, it were prevented) or its reduction to a more manageable size. Sir William Beveridge, in proposing a program of this kind for England, lists not only public spending of the kinds we have mentioned above, but also investment in a socialized sector of industry, including transport and power and coal or steel; the creation of a National Investment Board to provide loans and tax rebates to private business as a means of stabilizing private investment; the encouragement of low prices for essential consumers’ goods, if necessary, by a system of subsidies; and an increase in private spending to be brought about by increased national income and broadened social security provisions. Some of these suggestions, it will be noted, are at present more appropriate for England than the United States, since they assume a larger degree of public ownership than prevails in this country.

As for the criticism that our public spending did not put to rout the greatest depression we have ever experienced, the usual answer is that the program which we adopted was a halting, half-hearted one; that we did not at any time spend sums large enough to provide full employment, but continually lived in hope that the governmental “pump-priming” would soon enable private enterprise to go ahead without public assistance; and that public spending for full employment, once begun, must be carried on relentlessly until the battle is won. Indeed, the Keynesians see no reason why the government should not indefinitely finance full employment, since they regard such financing as less wasteful than paying relief benefits to millions of unemployed and having thousands of businesses closed down because demand has not been sustained. Moreover, since it is axiomatic that human wants are indefinitely expansible, they hold that there will always be worth-while undertakings upon which to spend public funds in such quantity as to provide the expenditure required to maintain an economy which would offer employment to all who were able and willing to work.

Paying the Bill for Full Employment. The ordinarily troublesome question of how to pay the bill is met by the Keynesians in this way: The

cost of providing full employment, like the cost of every governmental project, will have to be paid from public revenues. This means, in the long run, that the people must pay for these desirable goods through taxation, though at times the cost might have to be met through borrowing—that is to say, through “deficit financing.”

To those who accept the Keynesian doctrine, the problem of securing sufficient funds holds no terrors. What must be done above all else is to keep production going! If the output of the country is maintained at a high level, the national income will necessarily be large and there will be no difficulty in securing from taxation whatever revenue is required to finance the program of full employment. As Professor Hansen puts it:

The notion that we cannot finance our production is quite without foundation. Every cent expended, private and public, becomes income for members of our society. Costs and income are just opposites of the same shield. We can afford as high a standard of living as we are able to produce. We cannot afford to waste our resources of men and material. We cannot afford to use them inefficiently. But we cannot afford idleness. The idleness of the decade of the thirties was responsible for the loss of 200 billion dollars of income. . . . There is not—there cannot be—any financing problem that is not manageable under a full-employment income. From an income so vast [as we produced in war years] we can raise large tax revenues—large enough to service any level of debt likely to be reached and to cover all other government outlays—and still retain for private expenditures much more than we had left in former years. . . . But it is not necessary or desirable under all circumstances to finance all public expenditures from taxes. Whether taxes should equal, fall short of, or exceed expenditures must be decided according to economic conditions.¹³

The Current Attitude Toward Full Employment. There can be little doubt that people in general favor full production—a volume of output which would keep our factories, mills, stores, and other places of business humming. Probably most Americans would prefer to have this full production—and consequent full employment—brought about through free enterprise rather than through governmental “interference.” But some at least have come to agree with Sir William Beveridge in his belief that no power less than the state can assure adequate total spending at all times. It was doubtless the acceptance of this view, coupled with a recognition of the necessity for outlawing unemployment, that prompted the Editors of *Fortune* in 1942 to publish this declaration: “We propose that the government should underwrite permanent prosperity: that it be established government policy, whether Republican or Democratic, to maintain reasonably full employment in the United States.” With this statement went the argument that private industry must have “every chance to operate at capacity and to invest as much of the nation’s savings as it can absorb.” But the conclusion was unequivocal: “When involuntary unemployment

¹³ *Postwar Economic Problems*, p. 15.

threatens to be either chronic or widespread, it is not to be borne. We believe the government should set a minimum, and a minimum reasonably close to our full capacity, below which employment should never be permitted to fall."¹⁴

Professional economists are divided in their appraisal of the desirability of attempting to avoid depression and unemployment through governmental spending. The average American citizen, we may safely assume, knows little or nothing about the Keynesian theory; and the action taken by Congress in 1946 on a "full employment" proposal indicates that the idea has not yet won great favor in our national legislative halls. It is true that Congress passed the Murray-Patman Act, which purported to deal with the problem; but what began as a "full employment" measure wound up, as we recorded in Chapter 25, as an "employment-production" act which gives little promise of providing the country with the detailed, long-range program which the Keynesians regard as essential to their program. Certain persons who were keenly interested in the passage of effective legislation of this type accepted the Murray-Patman Act as "better than nothing" and "a move in the right direction"; but it is hard to believe that this Act will be the instrumentality through which either the truth or the falsity of the Keynesian theory of employment will find practical demonstration.

Criticisms of Public Spending to Provide Full Employment. Critics of programs of this kind direct their attack along several lines. First of all, they question the necessity of governmental spending on a large scale, arguing that if government will adopt a "hands-off" policy, business depressions will doubtless come and go much as they did prior to the post-1929 depression—which, they charge, was prolonged by "interference" from the Hoover and Roosevelt administrations. They frequently attack the so-called theory of economic maturity—the notion that the country has so fully exploited its economic possibilities that attractive opportunities for investment are too limited to use up our unconsumed current income—though this theory is not an essential part of the Keynesian doctrine.¹⁵ They hold that if the government will only restrict its economic activities to the encouragement of free enterprise, by passing just tax laws and other legislation favorable to business, private investment will be so greatly stimulated that governmental spending to insure full employment will be unnecessary. They argue that there is no guaranty that governmental spending would solve the problem of unemployment, that it might easily lead to governmental participation in control, to a considerable degree of government ownership, or even to a planned economy closely resembling socialism, and they point out that in a society of this type we would sadly miss certain "freedoms" which we now accept as a matter of course.

¹⁴ *Fortune*, Supplement, December, 1942, p.

¹⁵ *Ibid.*, p. 8.

These are important criticisms, to each of which the Keynesians naturally have what they consider to be adequate answers. We cannot undertake to examine them in detail though in most instances they have been touched upon elsewhere in this book.¹⁶ The plain truth is that no one knows definitely and with certainty what the outcome of a thoroughgoing program of governmental spending would be, and the chances are that we shall never know unless and until we try it out. An economic society which is beset by recurrent depressions and unemployment "takes a chance" no matter what its course of action or inaction may be. Undoubtedly there is a possibility that harm might result from the adoption of the policy of spending which we have been examining. We incline to the view that a freely operating capitalistic system, with a minimum of governmental control and regulation, is likely to furnish a higher average level of employment, production, and income than would result from the adoption of any governmental full employment policy which did not include some possibility of eventually leading to collectivism, and perhaps even to political and economic dictatorship. On the other hand, there may be grave danger in not taking specific measures to conquer the business depression. Such well-known economists as Frank H. Knight, Paul H. Douglas, George Soule, Joseph A. Schumpeter, and A. R. Burns have voiced fears for capitalism¹⁷ which are strikingly similar to those expressed by Professor Hansen in the following statement: "It is no longer possible to accept the thesis that cycles of prosperity and depression may be complacently regarded as a characteristic of a system of free enterprise and private property. In a modern world no system can survive which permits the continued recurrence of serious depressions. Should it prove true, as some still argue, that periodic depressions are an inevitable concomitant of private property and free enterprise, then this system is doomed."¹⁸

Conclusion. In bringing our discussion of business cycles to a close, several questions of general significance may be raised. Is it true that the degree of economic stability attainable is in direct proportion to the economic control possessed by the government? If so, to what extent are we willing to sacrifice our present individual freedom of initiative in the interests of increased stability? To what extent can stability be attained without acting as a deterrent to the normal tendency of our economic system to expand? It is with a recognition of the problems set forth and implied in these questions that attempts to find a solution of the business

¹⁶ See, for example, the discussion of governmental functions and expenditures in chap. 43.

¹⁷ See John Ise, *Economics*, New York, Harper & Brothers, 1946, pp. 572, 573.

¹⁸ *Postwar Economic Problems*, p. 10. Business analysts and captains of industry have given expression to similar views. Said Paul G. Hoffman, president of the Studebaker Corporation, recently: "We cannot live with fluctuations such as that which took place between 1929 and 1932, when business volume dropped more than 50 per cent. Another collapse of that magnitude might cost us our free economy." (Quoted in *The New York Times*, June 26, 1947.)

cycle must be made. No phenomenon in the economic world has more serious consequences or presents greater difficulties than the one we have been examining. Indeed, the knowledge and understanding needed for an adequate solution of this problem are still largely lacking. For the present, at least, the problem must be approached experimentally, in the hope that we may come across clues which will lead us eventually to the development of a satisfactory solution.

1. What is a "business cycle"?
2. Explain the significance of Fig. 42. Just what does this chart represent?
3. Why might the production of a country be expected ordinarily to increase in volume from year to year?
4. Contrast the irregular production curve in Fig. 42 with the "trend" curve that appears in the same figure.
5. How long does a business cycle last?
6. In which years during the past two decades have we suffered seriously from decreased production? Which have been "boom" years?
7. Why is there a tendency, following a "slump," for production to strike a new high level of activity, instead of merely regaining the lost ground?
8. Name the "periods" of the business cycle in the order of their occurrence.
9. Give the characteristic features of each period of the business cycle.
10. What is the central idea of the "self-generating" theory of business cycles?
11. Explain the significance of the term "self-generating."
12. "Each period of the business cycle is the result of certain causes which have developed in the preceding periods of the cycle." What are these "causes"?
13. Why should "recovery" grow out of a business depression?
14. Would society be better off if business were stabilized? Why or why not?
15. Why is it probable that no single device will succeed in achieving stability?
16. What relationship is there between price stability and cyclical stability?
17. What is the principal value of a public works program in connection with the cycle?
18. How might the payment of unemployment benefits influence cyclical movements?
19. How should the funds to finance a public works program during a period of liquidation or depression be raised? Why?
20. When and from what sources should the funds with which to pay unemployment benefits be secured? Why?
21. Is it possible to secure stability through the direct control of production? Why or why not?
22. What characteristics of our present economic system tend to make cyclical fluctuations almost inevitable?
23. Distinguish between reform, relief, and recovery.
24. Describe the governmental attempts at (a) relief, (b) recovery, and (c) reform, since 1929.
25. What additional governmental powers might have contributed to the success of the recent recovery efforts?

26. Outline briefly the "Keynesian approach" to the problem of unemployment.
27. Explain the necessity for "offsets" to savings if depression is to be avoided.
28. What part might government play in the provision of full employment? Why should not some other agency perform this function?
29. Define "full employment."
30. Why did not extensive governmental spending in the post-1929 period bring a speedy end to the depression?
31. Do you feel that governmental spending, engaged in to provide full employment, would be better than giving unemployed workers a dole? Why or why not?
32. Do you regard the proposal of the Editors of *Fortune*, that "the government should underwrite permanent prosperity," sound and significant? Explain your answer.
33. What is the nature of the criticisms that have been leveled against the Keynesian program? Do they strike you as sound or unsound, and for what reasons?

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International Trade: Facts and Principles

IN DESCRIBING THE PROCESS OF EXCHANGE,¹ WE LOOKED BRIEFLY INTO THE nature of trade and found that, in the final analysis, it consists of an exchange of commodities and services for other commodities and services. Indeed, the true nature of trade is most easily seen in its simplest form, barter; and it is for this reason that the student of economics is urged in specific cases to disregard temporarily the money phenomena of modern exchange and concentrate upon what is often much more significant, namely, the goods phenomena.

Barter, the Essence of All Trade. In one phase of international trade—the phase that deals with making payment for goods imported and receiving payment for goods exported—the question of money is of considerable importance. But in international as in domestic trade, there is much to be gained in most instances by reducing the problem to its simplest terms. If, then, one thinks of trade, whether domestic or foreign, in terms of barter, there is small probability of being led astray by the intricacies of exchange as they appear in our highly complicated economic order.

Similarity of Domestic and Foreign Trade. Our study of trade within a single country has prepared us for an excursion into the field of international business transactions. For, although domestic and foreign trade are not precisely alike, their differences are less pronounced than their similarities. All trade, it will be recalled, is closely related to specialization, and consists of certain persons exchanging surpluses of economic goods for the surplus economic goods of others.

Moreover, in foreign as in domestic trade, the transaction (with few exceptions²) takes place between *individuals*, and not between political units *as such*. When Pennsylvania steel is sold in Florida and Florida oranges are sold in Pennsylvania, the trade is conducted between individuals or business houses within the two states, and not between the

¹ In chap. 31.

² As, for example, when the government of the United States provided the government of Great Britain with war supplies.

states themselves. In like manner, it is ordinarily the individual business men of Europe and South America, and not the governments themselves, that arrange for (let us say) shipments of coffee from Brazil to France, and of textiles and cutlery from England to Chile. When we speak, in later paragraphs, of the foreign trade of the United States or of some other country, it must be understood that the expression is one of convenience rather than exactness, and that it is used to indicate trade between individuals located in different countries and not between the governments of two or more countries.

Trade takes place, unless restricted artificially by a tariff or other obstacles, whenever buying and selling appear to business men to be advantageous. And foreign trade, like domestic trade, is advantageous whenever (as must always be the case in a free trade) each party to the transaction gives up something that he prizes less highly than that which, through the process of exchange, he receives for this item. Whether the exchange takes place between two or more residents of a small secluded village; or between business men of widely separated states, such as Maine and California; or between the citizens of different nations, the fundamental principles of trade are bound to apply.

Some Complicating Features of International Trade. In several respects, to be sure, international trade differs from domestic trade. There are differences in customs of the people, in language, in monetary units, and frequently in tariff regulations. These several items of difference have little or nothing to do with trade that is carried on within a single country, but they often have the effect of complicating trade transactions which go beyond national boundaries.

FOREIGN TRADE OF THE UNITED STATES

We may now give some little attention to the nature of the trade carried on between the people of the United States and those of other countries. In Table 43 are listed certain important transactions in the international trade of the United States for the year 1940.³ The sixteen items shown in this table give a fair notion of the transactions which enter into the foreign trade of this country. We shall examine these several items briefly.

1. Merchandise. Most people, in thinking of foreign trade, have in mind shipments of material goods. Though the significance of such goods in international trade is usually exaggerated by persons unfamiliar with the true situation, merchandise is indeed ordinarily the most important single item of American foreign trade. About 45 per cent of the export and 30 per cent of the import items of the United States consisted, in 1940, of merchandise. Some of the specific commodities of which these

³ The data for this pre-war year give a better picture of ordinary activities of international trade than would the highly abnormal data of the war or early post-war years.

TABLE 43. BALANCE OF INTERNATIONAL PAYMENTS OF THE UNITED STATES, 1940

(Source: United States Department of Commerce)

Classes of Transactions	Credits ^a Cash Claims Due U. S. from Foreigners (Millions of Dollars)	Debits ^a Cash Claims Due Foreigners from U. S. (Millions of Dollars)	Difference ("+" means balance due U. S.) (Millions of Dollars)
1. <i>Merchandise</i>			
We sold commodities amounting to.....	4021		
We bought commodities amounting to.....		2625	+1396
<i>Service Items</i>			
2. <i>Freight and shipping:</i>			
We received from foreigners for such services..	223		
We paid foreigners for such services.....		327	-104
3. <i>Tourist expenditures:</i>			
Foreign tourists spent in the United States..	81		
American tourists spent abroad.....		223	-142
4. <i>Immigrant remittances:</i>			
New immigrants brought into the United States.....	30		
Immigrants in the U. S. sent "back home"....		120	-90
5. <i>Interest and dividends on private investments:</i>			
We received from foreigners.....	525		
We paid to foreigners.....		215	+310
6. <i>Government transactions:</i>			
Foreign governments paid the United States..	28		
United States government paid foreigners....		122	-94
7. <i>Miscellaneous services:</i>			
We received from foreigners for such services..	164		
We paid foreigners for such services.....		66	+98
8. <i>Contributions:</i>			
We gave to foreign causes.....		55	-55
<i>Capital Movements</i>			
9. <i>Long-term investments:</i>			
Net balance.....		53	-53
10. <i>Changes in international banking accounts:</i>			
Net inflow of banking funds to United States..	873		+873
11. <i>Advance payments by British government</i>	720		+720
12. <i>Miscellaneous capital items</i>		170	-170
<i>Gold, Silver, and Paper Currency</i>			
13. <i>Gold:</i>			
Exports from United States.....	5		
Imports to United States.....		4749	-4744
Earmarking operations (net).....	645		+645
14. <i>Silver:</i>			
Exports from United States.....	4		
Imports to United States.....		59	-55
15. <i>Paper currency movements:</i>			
Net inflow to United States.....	33		+33
16. <i>Other transactions</i>	1432		+1432
	8784	8784	....

^a Credit transactions are those which may be expected to result in payments into the United States; debit transactions are those which will result in payments from the United States to foreign countries.

exports and imports were composed will be noted later. For the present, we may observe that such things as the sales of bunker coal and oil to foreign vessels, ship repairs, and several other items are included among the more usual types of merchandise. Much of the exports of the United States in 1940 consisted of war supplies or "strategic commodities" sent to the United Kingdom and other parts of the British Empire. It has been customary, in the past, to regard silver as an article of merchandise; but the increasing importance of silver shipments in American foreign trade in recent years has led to its being given a separate listing. Silver appears in our table under Item 14.

2. Freight and Shipping. Freight charges entering into foreign trade consist of items arising out of ocean, Great Lakes, and land transit. Ocean freight includes American merchandise carried in vessels owned by foreigners, and foreign goods transported in American bottoms. A foreign trade situation exists also in connection with traffic on the Great Lakes, in which commodities are moved from the United States to Canada, and vice versa. In addition to freight hauled by water, goods transported by rail sometimes enter into international trade. Great quantities of Canadian grain are carried by American railroads from the Great Lakes (usually from Buffalo) to the Atlantic seaboard. An even larger item is that charged by Canadian railways for carrying American lumber, grain, and packing-house products, which in many cases are reshipped from Vancouver or Montreal. Table 43 shows that, in 1940, we paid foreigners \$104,000,000 more for freight and shipping than we collected from them for this type of service.

3. Tourist Expenditures. Expenditures of tourists in foreign countries are also included in the international balance sheet. The expenditures of Americans traveling abroad appear as "debits," and those of foreigners in this country as "credits." It is estimated that in 1940 American tourists spent \$223,000,000 in foreign countries, as against \$81,000,000 spent by foreign tourists in the United States. This is 60 per cent less than was spent for similar purposes in 1937, and this reduction is attributable to uncertain world conditions which discouraged foreign travel in 1940. Departures from the United States to European and Mediterranean destinations fell from 135,000 in 1939 to 16,000 in 1940. "Canadian-American tourist traffic involves a larger total expenditure than that between any other two countries in the world,"⁴ but there were only 80 per cent as many United States visitors to Canada in 1940 as in 1939, and the number of Canadian visitors to the United States fell off almost 50 per cent. Americans, as is well known, do a great deal of traveling, a fact which may be explained in part by the large per capita income of the United States. Expenditures of foreign tourists in this country are ordinarily

⁴ United States Department of Commerce, *Trade Information Bulletin No. 625*, Washington, Government Printing Office, 1929, p. 11.

about one-quarter as great as those of American travelers in other parts of the world.

4. Immigrant Remittances. Many immigrants who have come to the United States during the past few decades have left behind them in their "old countries" relatives who are partly dependent upon them. From their earnings in this country (which are usually much larger than the incomes to which they have been accustomed in their native lands), these immigrants have frequently remitted considerable sums to their dependents. Remittances of this kind account for a "debit" item of \$120,000,000 in Table 43. The small offsetting item of \$30,000,000 appearing as a "credit" consists of cash brought into the United States by immigrants entering this country in 1940.

5. Interest and Dividends on Private Investments. When capital funds seek investment in foreign countries, they do so for the reason that investment opportunities abroad appear to be more advantageous than those at home. The investments are made, of course, with the idea of receiving an income from the securities that have been purchased, and this income forms an item of international trade. American private investments abroad have been placed chiefly in Latin America, Europe, and Canada. Interest on such investments amounted in 1940 to about \$525,000,000, and the foreign holders of American securities received, in that year, interest payments totaling \$215,000,000.

6. Government Transactions. We have already noted the fact that foreign trade is usually conducted between individuals and not between governments. But in some instances governments buy from other governments. Credits and debits of this kind in 1940 included (a) net receipts from Panama Canal operations, (b) expenditures abroad by the various executive departments, (c) remittances by the Veterans' Administration, and (d) cost of foreign representation in the United States and United States representation abroad.

Between 1923 and 1930, this country received more than \$200,000,000 annually as principal and interest payments on the huge sums borrowed by our allies in World War I. But payments of this kind declined steadily after 1930, and stopped entirely shortly after the beginning of World War II. In 1940, our government paid other governments \$94,000,000 more than it received from them.

7. Miscellaneous Services. Grouped under the heading "Miscellaneous services" are imports and exports of electric power; magazine and newspaper subscriptions; disbursements for advertising; cable, radio, and telephone services; royalties on motion pictures, and so on. In the case of miscellaneous items, as in other international transactions, there are both credits and debits. For the year 1940, as is shown in Table 43, transactions of this kind resulted in a net balance of \$98,000,000 due the people of the United States from foreigners.

8. Contributions. Total contributions made to foreign fields of activity by United States charitable, religious, educational, and scientific institutions during 1940 are estimated at \$55,000,000 on the basis of data submitted by 125 organizations.

9. Long-Term Investments. Citizens of the United States have made investments abroad for many years, and American securities have been bought by foreigners who, for one reason or another, have wanted to invest their funds in this country. Year by year these investments are increased through purchases of foreign bonds and stocks, or reduced by sales of such securities or by the payment of matured bonds. In 1940, the purchases of long-term foreign securities by Americans and the sales of American securities to foreigners resulted in a net balance of \$53,000,000 due the people of other nations.

10. Changes in International Banking Accounts. It is quite common for banks to have deposits with banking institutions of other countries, largely for the purpose of paying balances arising out of international trade. There has also been an extensive development of commercial short-term loans in foreign countries. A recent government statement showed that American deposits and short-term loans with foreigners amounted to \$137,000,000 at the end of 1940, while similar foreign deposits and loans in America reached the huge total of \$3,980,000,000. This represents a reversal of the situation that existed in 1933, when the figures were, respectively, \$1,082,000,000 and \$487,000,000. The net change in America's international deposits and short-term loans for the year 1940 was \$873,000,000.

The flow of short-term funds from foreign countries to the United States, during the past decade, has been in part the return from foreign money markets of American-owned banking funds, and in part a flight of foreign capital to the United States which was stimulated by political and financial uncertainties in Europe and elsewhere. This inflow of funds affected the trade balance in recent years in exactly the same way as though merchandise to this amount had been sent out of the United States.

11. Advance Payments by the British Government. In order to facilitate the production and purchase of war supplies in the United States, Great Britain (and also France) made some payments considerably in advance of the export of goods and provided capital assistance to certain producers where new plant facilities were needed. This item of \$720,000,000 represents payments of these kinds.

12. Miscellaneous Capital Items. The United States Department of Commerce includes under this heading certain capital items which are not explained in detail.

13. Gold. Gold is shipped from country to country for use in the arts, to settle the balances of international indebtedness (as will be explained in the following chapter), and to serve as reserves in the vaults of cen-

tral banks of various countries. In some cases the central banks are allowed to retain their holdings of gold abroad, and yet have such gold count as reserves if it is segregated and marked in such manner as to indicate that the identical coins or bars "earmarked" are the bank's property, and altogether subject to its disposal. It is not the practice of the Federal Reserve banks to count as reserve any gold held abroad; but when they have come into possession of gold abroad at a time when they held ample gold at home, they have sometimes had it earmarked there, largely in order to save the expense of shipping to the United States gold that might later require reshipment. Earmarked gold belonging to an American bank but held temporarily in a foreign bank is set aside to await instructions from the American bank, and cannot of course be used except upon specific order from the bank that owns it.

After the Munich conference of September, 1938, the flow of gold to the United States was greatly accelerated. In 1939 and 1940, the net gold imports to this country exceeded the gross merchandise exports—a situation without precedent in the history of the United States. Transactions in gold, including foreign shipments and earmarking, resulted in 1940 in a net "debit" of \$4,099,000,000. Gold exports amounted to only \$5,000,000, net earmarkings equivalent to exports of \$645,000,000 took place, and gold imports totaled \$4,749,000,000. This tremendous importation of gold, which established a new high record for gold shipments to the United States, was influenced largely by political and economic unsettlement throughout the world. Most of this gold came from the British Empire. "Shipments have been greatly in excess of production for several years," observed the Department of Commerce. "There is good reason to believe that many of the principal gold stocks have already been transferred for the most part to the United States."

14. Silver. Influenced greatly by United States Treasury purchases, in accordance with the provisions of the Silver Purchase Act of 1934, we imported \$355,000,000 worth of silver in 1935, \$183,000,000 worth in 1936, and \$92,000,000 worth in 1937. In 1940, we imported only \$59,000,000 worth of silver, the lowest imports of this kind since the Silver Purchase Act went into effect. Since we exported \$4,000,000 worth of silver in 1940, we had a net "debit" balance of \$55,000,000 on this item for that year.

15. Paper Currency Movements. There is ordinarily found, in every important country, a considerable amount of the paper currency of other important countries. In 1940, a good deal of American paper money which had been abroad was shipped back to this country. Deducting from such receipts the shipments of foreign paper currency out of this country to the countries of issue, we had a net "credit" of about \$33,000,000, which affected the balance sheet as it would have been affected by a shipment of merchandise from the United States.

16. Other Transactions. This is a residuum, made up largely of special items which it is not feasible to show separately.

Foreign Trade in Prosperity and Mild Depression. Since 1940 was a year of moderate business depression, the figures in Table 43 are lower than they would be if we had chosen a year of prosperity, say 1928. For in 1928 the total "credits" (and therefore the total "debits") on the international balance sheet amounted to \$10,559,000,000. Hence, the foreign trade of the United States in 1940 was only about 83 per cent as great as in 1928. We shall not undertake to examine here the 1928 figures item by item, but we may note the fact that American exports of merchandise in that year totaled \$5,334,000,000, and American imports of merchandise \$4,497,000,000. This means that exports and imports of merchandise in 1940 were, *in terms of dollars*, approximately 75 and 58 per cent, respectively, as important as in 1928. However, since the price level was slightly lower in 1940 than in 1928, the decline in actual *volume of commodities* was somewhat less than the decline indicated by a comparison of the total value of merchandise exports and imports for these two years.

AMERICAN EXPORTS AND IMPORTS OF MERCHANDISE

In 1940, 45 per cent of the export items of the United States, and 30 per cent of the import items, consisted of merchandise, as is shown in Table 43. Twelve years earlier, in 1928, when world trade was being transacted on a more extensive scale, these percentages were 50 for exports and 40 for imports.

We turn now to the consideration of some of the most important articles of merchandise that enter into American foreign trade. In Tables 44 and 45 are listed, respectively, the principal commodities exported and imported by the people of the United States. Two columns of figures are given in each table, the first being a five-year average for 1923-27, and the second for 1940. The five-year average represents more nearly "normal" conditions than do the 1940 figures, since the half-decade that has been chosen includes both "good" and "bad" years, from the business point of view, whereas 1940 was less good than average but was marked by unusually large exports of equipment for use in war.

Merchandise Exported from the United States. Of the fifteen items that appear in Table 44, five are of special interest because of their large contribution to the volume of total exports of this country. Heading the 1923-27 list is cotton, a commodity in the production of which the United States leads the world. Our five-year average gives to cotton an annual export value of about \$900,000,000, but in some years the figure has been above a billion dollars. However, our cotton sales in the world market are meeting increasingly stiff competition from other cotton-

producing countries, and will probably never regain their past preeminence. Japan was our best pre-war customer in the purchase of cotton, with England running a fairly close second.

Next in importance in the five-year average are petroleum and petroleum products (such as gasoline, kerosene, and lubricating oils), which we often export to the extent of approximately a half-billion dollars' worth a year. The export item third in rank, judged by value of product, is machinery of all kinds, including agricultural and industrial implements, office appliances, printing machinery, and so on, with values approximating \$360,000,000. Next in importance are automobiles, and automobile engines and parts. This item is one of increasing significance. Though the average for the five-year period was only \$281,000,000, there had been

TABLE 44. VALUE OF PRINCIPAL COMMODITIES EXPORTED FROM THE UNITED STATES
(Source: *Monthly Summary of Foreign Commerce of the United States*, December, 1940)

Classification	Value in Thousands of Dollars	
	Five-year Average, 1923-1927	1940
1. Cotton, raw	891,634	209,231
2. Petroleum and petroleum products	464,313	310,184
3. Machinery, all classes	359,491	665,428
4. Automobiles, including engines and parts	281,515	641,184
5. Wheat, including flour	275,291	34,106
6. Iron and steel products	159,237	588,953
7. Tobacco, unmanufactured	149,588	44,045
8. Copper and copper manufactures	147,690	155,000
9. Animal fats and oils	144,089	13,065
10. Coal and coke	140,517	92,254
11. Cotton manufactures	135,113	60,300
12. Meats	108,725	21,745
13. Sawmill products	101,997	36,781
14. Fruits and nuts	100,355	34,411
15. Rubber and rubber manufactures	51,163	44,410

a steady advance in the exports of automobiles for several years prior to the depression that began in 1929. The figure for 1927, for example, was \$388,000,000. The 1940 exports of machinery and automobiles were almost double the five-year average, because of extensive war-time orders. This is the explanation, also, of the large exports of iron and steel which, in 1940, were approximately four times as great as the average in 1923-27.

The last item of exports which we shall note specifically consists of wheat and flour, which in some years have brought to American exporters payments totaling slightly more than \$400,000,000, and in other years somewhat less than that amount. The United States has been a

consistent exporter of wheat, for the country produces regularly more foodstuff of this kind than can be disposed of in the home market. However, the wartime effort of other countries to make themselves more largely self-sufficient in the production of foodstuffs reduced substantially the quantity of wheat purchased from the United States by foreigners. The extremely low export of wheat in 1940 reflects this effort. Post-war shortages of grain in Europe and elsewhere brought our exports of wheat above the pre-war figures.

Our exports of petroleum are made possible, of course, primarily because important oil fields are located within our national boundaries. We are fortunate, likewise, in having land and climatic conditions favorable to the growth of certain agricultural crops. The suitability of the South for cotton production, and almost ideal conditions for the growing of wheat in the Middle West and North West, enable us to raise these crops so advantageously that it pays to produce both cotton and wheat for export. In machinery and automobiles we have commodities that are manufactured on the basis of large-scale production. This is a field of manufacture in which American enterprisers excel; and here, as in the items mentioned above, production is carried on so advantageously that it is profitable to produce not only for the domestic market but for foreign markets as well.

Merchandise Imported by the United States. In Table 45 the first four items have stood out in most years as exceptionally important from the point of view of import values. The cotton goods manufacturers of England look to the United States for the bulk of their raw material, and the silk manufacturers of this country have depended upon producers in other countries for the raw silk from which to spin and weave silk cloth. So great was the demand of American manufacturers for raw silk, that average annual silk imports totaled, in 1923-27, almost \$400,000,000 in value. But the encroachment of rayon upon real silk is indicated by the steadily declining imports of raw silk into this country; and, of course, our entry into World War II put a stop to our imports from Japan, which was formerly the source of most of our raw silk. Another important raw material for which we have depended almost wholly upon other countries is crude rubber. Owing largely to our enormous output of automobiles and motor trucks, and the consequent demand for rubber tires, we have often imported annually from the Malay Peninsula more than \$300,000,000 worth of crude rubber, which is here manufactured into rubber products. In one exceptional year (1926) our imports of rubber amounted to \$500,000,000. Japanese military activities in Malaya in early 1942 put an end to trade with this great rubber-producing region; and the development of synthetic rubber in the United States indicates that we shall never again depend so extensively as in the past upon imports of natural rubber, but shall use increasingly large quantities of synthetic rubber for many purposes.

We produce in the United States a part of the sugar required by our people, but the bulk of this commodity is imported from Cuba. Our average annual imports of sugar in "good times" amount to some \$300,000,000. Most of the imported sugar comes to us in the raw or unrefined state, and is subjected to manufacturing processes in American sugar refineries. Coffee, of course, is an article which we do not attempt to

TABLE 45. VALUE OF PRINCIPAL COMMODITIES IMPORTED INTO THE UNITED STATES
(Source: *Monthly Summary of Foreign Commerce of the United States*, December, 1940)

Classification	Value in Thousands of Dollars	
	Five-year Average, 1923-1927	1940
1. Silk, raw.....	379,980	125,997
2. Rubber, crude.....	326,935	303,118
3. Sugar, cane.....	296,090	127,309
4. Coffee.....	262,463	126,808
5. Paper and paper manufactures.....	128,279	132,618
6. Wool and mohair.....	110,894	84,604
7. Furs and fur manufactures.....	108,804	73,662
8. Petroleum and products.....	105,151	70,110
9. Hides and skins.....	100,078	50,188
10. Copper, ore and manufactures.....	92,239	73,492
11. Tin, including ore.....	86,685	130,981
12. Wood pulp.....	81,879	75,414
13. Fruits and nuts.....	80,745	46,997
14. Cotton manufactures.....	80,739	28,747
15. Sawmill products.....	74,459	24,177
16. Wool manufactures.....	72,354	25,161
17. Burlaps.....	72,176	45,476
18. Vegetable oils and fats.....	71,411	55,838
19. Tobacco, unmanufactured.....	69,834	36,722
20. Fertilizers.....	67,319	27,207

grow in the United States. Instead, we import our coffee from South America (chiefly from Brazil and Colombia), and we pay to foreigners for this commodity a little more than a quarter of a billion dollars annually in years of prosperity.

Raw Materials vs. Manufactures. Without dealing further with individual items of international trade, we may make the general observation that American exports consist in the main of manufactured goods, and American imports are made up rather largely of raw materials. There are, to be sure, some considerable exceptions to this statement. But the generalization is sufficiently true of present conditions, and it has special significance as indicating a definite trend. At present, approximately 65 per cent of our commodity exports consist of goods partly or wholly manufactured, as against 40 per cent in 1880; and whereas in 1880 we imported only about 20 per cent of our raw materials used in manufactur-

ing, today we import approximately 35 per cent of such materials. We see here an illustration of the well-known fact that America is becoming more distinctively industrial and less distinctively agricultural.

Direction of American Foreign Trade. Before quitting the subject of American exports and imports of merchandise, we may note briefly the sources of the imports into this country and the destinations of our exported commodities.

Table 46 gives an idea of the direction of American international trade on the basis of continental divisions. The figures here given are for 1940. To Europe went 41 per cent of our commodity exports in that year, including cotton and other raw materials, foodstuffs, machinery, automo-

TABLE 46. PERCENTAGE DISTRIBUTION OF UNITED STATES
EXPORTS AND IMPORTS, BY CONTINENTS, 1940

(Source: *Monthly Summary of Foreign Commerce of the United States*, December, 1940)

	Percentage of Total Exports	Percentage of Total Imports
Northern North America.....	18.0	16.6
Southern North America.....	8.5	9.7
South America.....	10.8	15.0
Europe.....	40.9	14.8
Asia.....	15.4	37.7
Oceania.....	2.4	1.3
Africa.....	4.0	4.9

biles, and so on. Economically, Europe is essentially a manufacturing region, and yet Europeans normally buy a large quantity of American manufactures, which are attractive because of high quality and low prices. Manufactured goods make up about one-half of our usual exports to Europe, the other half consisting of raw materials.

About 26 per cent of our exports in 1940 were sold to our neighbors in North America. Two-thirds of these commodities were manufactured goods. Asia, our next best customer, took almost 50 per cent more of our goods than South America, our third best. Nearly 60 per cent of our sales to Asia were of manufactured goods, while "semi-manufactures and finished manufactures" made up about 95 per cent of the goods exported to South America, Oceania, and Africa.

In imports, Asia headed the list in 1940, sending us nearly 38 per cent of all commodities brought into this country. Fifty-five per cent of these goods were raw materials, of which rubber was the most important single item. Europe ordinarily comes second in sending merchandise to the United States, but World War II so greatly reduced our 1940 imports

from Europe that North America (with 26 per cent) and South America (with 15 per cent) took second and third places, respectively, in that year. Three-fourths of the goods usually bought in Europe by Americans are manufactures, a fact which attests the industrial activity of that continent. United States imports from North America are chiefly from Canada, Cuba, and Mexico. Three-fourths of these purchases are of manufactured goods. The imports from South America, on the other hand, consist of raw materials to the extent of four-fifths of the total. Coffee from Brazil and Colombia, wool from Argentina, and nitrates from Chile account for the bulk of these imports. Oceania and Africa are relatively unimportant in the matter of exports from and imports to the United States.

GAINS THROUGH INTERNATIONAL TRADE

Trade, as we have so often said, consists of the exchange of surpluses that arise from the practice of specialization. International trade is the result of geographical or territorial specialization. It is specialization pushed beyond national boundaries. Nowhere are the benefits of specialization more clearly seen than in foreign trade. This is particularly true in the case of certain materials which depend upon favorable climatic conditions if they are to be produced with small effort. Sugar, coffee, cotton, rubber, and several other commodities fall within this group. Since they may be grown with slight expenditure of capital and labor in some parts of the world, but in other regions only at great cost, if indeed at all, it is obviously advantageous to resort to specialization and exchange in the production of such goods.

Success in Relation to Natural Endowments. It is generally recognized that success is most likely to attend the efforts of the individual who engages in the type of work for which he is best fitted by nature. Fred Allen and Bob Hope have probably achieved greater success than they could have hoped for in academic circles; and, in like manner, our college professors doubtless do well to confine their efforts to things academic rather than to venture into the field of comedy. It is equally true that a nation is most likely to prosper economically if it applies its energies to the type, or types, of production in which it is able to engage most efficiently.

Two Important Advantages of Foreign Trade. In dealing with the benefits of international trade we shall speak from the American point of view, though the choice of country makes no difference, of course, in the principles involved. In general, the people of the United States gain through foreign trade in that they are enabled, by reason of this trade, first, to enjoy some goods of which they would otherwise be deprived; and, second, to secure other commodities at lower prices (or

at least to *greater advantage*) than if the goods were produced in this country.

The Enjoyment of Exotic Products. The first of these gains is fairly apparent. It is true that bananas, coffee, and the like might possibly be grown in the United States under glass. But we know that, without any question, production carried on under such conditions would be highly disadvantageous and would result in prices so excessively high that they could not be paid by the average citizen. Consequently, we are justified in saying that international trade brings to us certain goods which, in the absence of such trade, we should not be able, as a people, to procure.

The Principle of Comparative Costs. The second gain noted above is somewhat less obvious; and yet a tremendous amount of foreign trade is carried on, not because in its absence a country would be compelled to get along without desirable goods, but rather for the reason that, in the output of an article that could be produced in two countries, it is often advantageous for one country to defer to the other. That is, the country that is less favorably equipped for a special kind of production yields to the country that is particularly well prepared to turn out the goods in question. This latter country thus specializes in making the article, producing enough not only for itself but for the other country as well, with the result that both benefit by the arrangement.

Absolute Advantage. This principle, which is known as the principle of comparative costs, is readily understood when the advantage is *absolute*, but it is more difficult to see in a case of *comparative* advantage. It is clear, for example, that it would be wise for the experienced banker to concentrate upon the problems of banking, and for his stenographer to specialize in typing and similar work. The point is that each is, in his or her particular field of endeavor, more skillful than the other; and it would be wasteful for the stenographer to take a turn at money and credit while the banker pounded the typewriter. The latter is more productive when specializing in money matters than in the rôle of typist; and the stenographer is more productive in her field of specialization than in determining upon the placing or calling of loans.

By the same token, Brazil is more effective than the United States in the growing of coffee, and this country is more productive than Brazil in the manufacture of farming implements. In this instance, it is said that Brazil has an absolute advantage in the production of coffee, and the United States an absolute advantage in the production of farm machinery. In cases of this kind, it is clearly the part of wisdom for these countries to engage in foreign trade, so that the United States may get her supply of coffee, and Brazil her farming implements, at lower prices than would prevail if the two nations attempted to practice self-sufficiency.

Comparative Advantage. But (reverting to our former illustration) let us suppose that the banker is himself an expert typist and is able to

operate the typewriter so skillfully as to exceed the speed of his stenographer. In this instance, he would have an *absolute advantage* in both banking and typing. Should he, then, undertake to act as his own typist, or should he allow his stenographer, who is a less skillful typist than he, to write his letters and other papers? The common-sense answer is that the typing should be delegated to the stenographer; for, though the banker is more productive than the stenographer in both banking and typing, yet he is more productive as a banker than as a typist. Therefore, it will pay him better to concentrate upon banking and allow another to do his typing. Because of the specialization of the banker in the field which is for him most productive (namely, finance), the stenographer is said to have a *comparative advantage* in typing.

Consequences of Comparative Advantage. We find that a great deal of international trade depends upon advantages of this latter type. So fortunate is the United States in the matter of natural resources, efficient management, and competent labor, that it is able to produce a great many commodities at an absolute advantage. But its advantage in the production of a limited number of articles is so great that in some instances it willingly surrenders absolute advantage in one form of production in order to embrace more fully a still greater absolute advantage in another.

These items that are neglected by us are then produced at a comparative advantage by other countries, which are thus able to engage in trade with the United States; and both countries gain in the process. It is claimed, for example, that we could produce flax quite as advantageously as any country in the world. But our facilities for growing other agricultural crops are so pronounced (and so superior to our advantages for the raising of flax), that, so far as agriculture goes, we have usually specialized in cotton, wheat, and other farm products, and imported our flax from Russia and Belgium.

Effectiveness of Productive Effort. Whether the advantage enjoyed by a nation is "absolute" or "comparative" does not matter particularly. The important thing is that the people of a country should, from the economic point of view, always engage in those types of production in which their efforts will be employed most effectively. In some economic activities, the laborers of one country may be much more productive than those of another. In the mining of coal, for example, the coal workers of the United States are much more productive than the coal workers of England. It does not follow from this fact that no coal should be mined in England; but if there are other industries in which England has an absolute advantage over the United States, or in which she suffers a smaller disadvantage (enjoying, therefore, a comparative advantage), Englishmen would do well to concentrate upon these industries and leave the mining of coal to the laborers of the United States.

Some Reasons for Productive Superiority. In suggesting that labor is more productive in some countries than in others, a word of caution is necessary. The expression is not used with the thought of implying that this superiority results from greater industry or skill on the part of the workers, though this might, indeed, be the case. But it is probable that the greater productivity comes more often from conditions other than the workers' greater skill and aggressiveness. In the case of coal mining cited above, the American worker produces more than twice as much per day as the British worker. But if the American miner were put to work in British mines, it is likely that his productive superiority would immediately disappear. For this superiority is due chiefly, and perhaps wholly, to the greater thickness and accessibility of coal seams in the American mines and to the employment of more mining machinery here than in Great Britain. Advantages, "absolute" or "comparative," do sometimes result from exceptional intelligence and skill on the part of labor. But probably more often they are attributable to natural resources or climatic conditions, to the great abundance of capital of modern types, to exceptionally able management, or to a combination of several of these factors.

The gains of foreign trade, then, are similar to the gains of domestic trade. Through geographical specialization, as through individual specialization, the total product is increased. By creating and exchanging surpluses of specialized goods, individuals are enabled to secure more commodities and services than would be available without specialization. If this is true of individuals within a country, it is equally true of individuals in different countries; and foreign trade, as was pointed out at the beginning of the chapter, is almost wholly trade between individuals and not between nations.

1. In what respects are domestic trade and foreign trade similar? In what respects are they dissimilar?
2. Does the expression, "the foreign trade of the United States," refer to trade of this government with other governments?
3. What was the total amount of foreign trade (expressed in dollars) of the United States in 1940, as shown in Table 43?
4. What part of our total foreign trade consists of merchandise transactions?
5. Which are greater, our exports or imports of merchandise?
6. Why should gold be shipped from country to country? How does "earmarking" lessen the amount shipped?
7. How do you explain the fact that the American item of "tourist expenditures" is much larger than the item indicating foreigners' tourist expenditures in this country?
8. Name the five principal exports of the United States, giving some idea of the value of each.

9. What is there about our productive abilities that makes it possible for us to export these five items in large quantities? Examine each item separately in answering this question.
10. Name the four principal imports of the United States, giving some idea of the value of each.
11. From what regions do these four commodities come? Would you classify them as "raw materials" or "manufactured goods"?
12. It is said that the United States is becoming more distinctively industrial and less distinctively agricultural. Illustrate with items entering into foreign trade.
13. Upon what geographical regions are we chiefly dependent for our imports?
14. What geographical regions are the leading purchasers of American exports?
15. What is the relationship between international trade and specialization?
16. What are the two great advantages of foreign trade?
17. "In the output of an article that could be produced in two countries, it is often advantageous for one country to defer to the other." Why?
18. Give an example of "absolute advantage" as it may be seen in production by two countries.
19. Give an example of "comparative advantage."
20. In the manufacture of many kinds of goods, American workers are "more productive" than the workers of other countries. Why?

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The Settlement of International Obligations

FOREIGN EXCHANGE

WE TURN NOW TO ONE OF THE COMPLICATIONS OF INTERNATIONAL TRADE which has to do with making payment for goods imported and receiving payment for goods exported. The difficulty in effecting these payments arises partly from differences in the monetary units used in two countries—but it is also due, in part, to the distances involved.

Payments in Long-Distance Trade. The first of these items does not, of course, affect domestic trade. But the second may prove to be something of a problem within a country of great size. In trade between Massachusetts and California, for example, there is the necessity of making and receiving payment. If a Boston shoe manufacturer sells his product to a San Francisco merchant, he probably receives in payment a check payable at a San Francisco bank. This check he deposits in his own bank in Boston, but the Boston bank must in some way collect from the bank in San Francisco. Prior to the introduction of the Federal Reserve System, a charge was made for this service, theoretically to cover the cost of gold shipment from California to Massachusetts and loss of interest during the period of transport, though in reality the actual gold was seldom transferred. Check collections of this kind are now made without charge, through the Federal Reserve banks, by means of the gold settlement fund (which was described in Chapter 33), so that the payment of long-distance domestic obligations no longer constitutes a real problem.

Gold as International Money. In international trade some of the difficulties due to differences in monetary units have been disposed of in normal times by expressing international obligations in terms of gold. Though British paper money would not be acceptable to an American exporter of cotton since it could not be used in ordinary business transactions in this country, gold to the proper amount is quite welcome, because it can be converted readily, and without loss, into American dollars upon application to the United States Mint. In like manner, American gold is acceptable in foreign countries operating on a gold standard. What we

are saying, then, is that gold, because of its desirability as a commodity, is generally acceptable and serves as money practically throughout the world.

Avoidance of Gold Shipments. It would be highly undesirable, however, to make payment for all international transactions in actual gold. An arrangement of this kind would have meant in 1940 the shipment of about \$17,500,000,000 worth of gold to take care of the trade transactions between the United States and other countries, as may be seen by examining Table 43. In 1929, when foreign trade was greater than in 1940, the figure would have been some \$21,000,000,000. Fortunately, there is no need to make such huge shipments, for in foreign trade, as in domestic trade, business transactions tend to offset one another. It is a truism in international trade that, over a long period of years, a country cannot sell goods unless it will buy; that is, it cannot hope to engage in export trade unless it is willing also to import goods from other countries. This is a matter into which we shall inquire shortly.

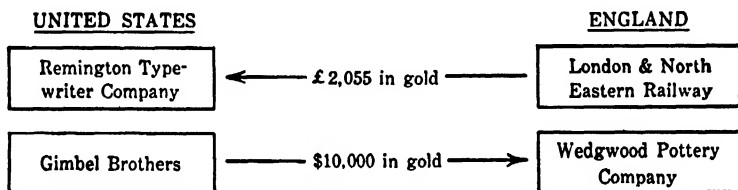


FIG. 43. SETTLEMENT OF INTERNATIONAL OBLIGATIONS BY GOLD SHIPMENTS

Economy in the Use of Gold. Table 43 shows that in 1940 the foreign trade of the United States consisted of exports and imports amounting to some \$17,500,000,000. Of this amount, gold movements came to \$4,754,000,000, or 27 per cent of the total. We have seen that this was a highly abnormal year in the matter of gold shipments, since foreigners sent large quantities of gold to the United States in the interests of safety. Hence, we shall understand better the rôle played by gold in international trade if we consider a year of both peace and prosperity. In 1928, for example, less than \$1,000,000,000 worth of gold changed hands in carrying out \$21,000,000,000 worth of international business transactions. The reason so huge a volume of trade can be transacted with so slight a movement of gold is that, just as in the clearing houses of our banking system, claims are set over against claims, debits against credits, and thus most obligations are canceled without necessitating the shipment of gold.

The general principle involved in the cancellation of debits and credits arising in international trade may be made clear through a very simple illustration. Let us suppose England and the United States to be on the gold standard, as they were prior to 1931, with no governmental restrictions upon the shipment of gold. Now if, under these conditions, the Remington Typewriter Company sells \$10,000 worth of typewriters to

the London and North Eastern Railway, and at about the same time the Wedgwood Pottery Company ships a £2055 order of china to Gimbel Brothers of New York, there are several possible ways of settling these obligations. With our assumption of £1 sterling being equal to \$4.87, as in 1931, the value of the shipment of typewriters would equal exactly the value of the shipment of china. Hence, the shipments of goods might be paid for by the shipment of gold, as shown in Fig. 43.

The Cancellation of International Obligations. But it is troublesome and costly to ship gold to England from the United States, and to the United States from England. We may be sure that these importers, whose problem it is to effect payment, would try to avoid an actual transfer of gold. This would be fairly easy if all four parties concerned were acquainted with one another and knew of the sales that had taken place.

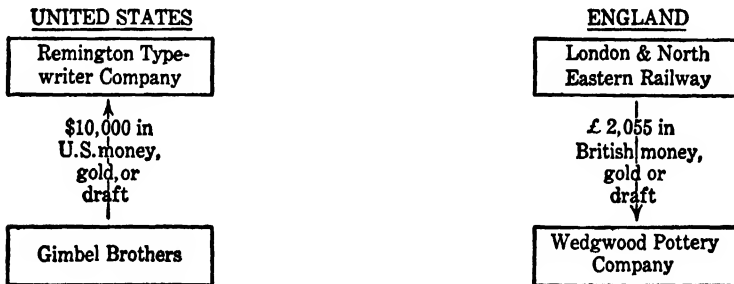


FIG. 44. SETTLEMENT OF INTERNATIONAL OBLIGATIONS BY CANCELLATION

In such event it could easily be arranged that Gimbel Brothers should pay \$10,000 to the Remington Typewriter Company, and the London and North Eastern Railway Company a like sum in British money (£2055) to the Wedgwood Pottery Company. Through a canceling-out process of this kind both obligations could be met without the use of gold. The transaction would be as in Fig. 44.

This is, fundamentally, the financial transaction that takes place in the settlement of obligations arising in foreign trade, but the process is not quite so simple as it appears above. Our illustration is based upon two assumptions that we cannot make with safety, in addition to the hypothesis that there is no governmental restriction to the free shipment of gold between these two countries. The first is that the parties engaging in international trade know of each other's business dealings with foreigners; and this is certainly a far-fetched notion, in view of the large number of persons engaging in such trade. The second assumption, that transactions of exactly equal amounts (in the present case, of \$10,000 each) can be located and canceled out, is likewise not warranted.

The Use of "Foreign Exchange." For these and other reasons, there has come into existence a class of middlemen who are bankers or private

dealers in "foreign exchange" (the name given to foreign drafts or bills of exchange). The introduction of these bankers into the situation removes the difficulties we have just described. Their presence in the field makes it unnecessary for exporters and importers to know one another, for these bankers provide a recognized market in which exporters can sell their claims against foreigners, and importers can purchase bills of exchange with which to pay obligations due foreign exporters. There is the further fact that these dealers in foreign exchange, like commercial bankers, exchange bank credit for personal credit, and thus render it more generally acceptable.

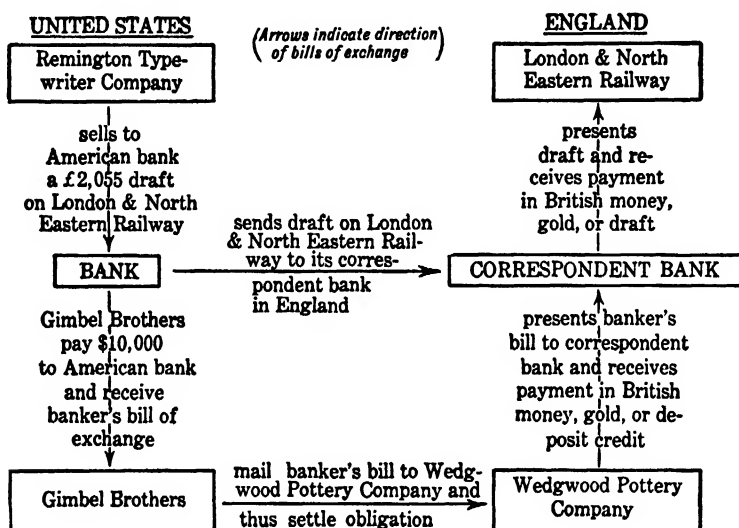


FIG. 45. THE USE OF "FOREIGN EXCHANGE"

The entrance of the banker into the picture gives us a situation such as is shown in Fig. 45. The Remington Typewriter Company, wishing to secure payment at once, sells to a New York bank (dealing in foreign exchange) a draft or commercial bill ordering the London and North Eastern Railway to pay the Remington Typewriter Company £2055, or its equivalent in gold. This sale of the endorsed draft gives the Remington Typewriter Company immediate possession of the \$10,000 due this concern; and the bank proceeds to collect the draft by sending it to a correspondent bank in London, which in turn presents it to the London and North Eastern Railway Company and receives payment in British money. Gimbel Brothers, on the other hand, buy from the bank a banker's bill of exchange for £2055, which it forwards to the Wedgwood Pottery Company; and this concern, by presenting the bill at the correspondent bank, secures payment for the shipment of china to the Gimbel store. Here, again, all claims have been settled without transfer of gold overseas.

"Foreign Balances" of Dealers in Exchange. We may bring our illustration closer to reality by multiplying instances. It must be understood that not only the Remington Typewriter Company, but thousands of other American exporters, are selling to the American bank claims upon English importers. The bank, by sending the purchased drafts to its correspondent bank in London, builds up in the London organization a large balance which is held subject to the order of the American bank. But, also, the American bank is constantly selling banker's bills (such as that purchased by Gimbel Brothers) which before long are presented for payment at the correspondent bank; and these payments bring about a steady reduction in the balance that is being built up in the manner described above. It must be remembered, of course, that there are many banks dealing in foreign exchange, and many correspondent banks in foreign countries, instead of only the one of each that enters into our example.

In the payments described above, the American concerns took the initiative in both instances; that is to say, the Remington Typewriter Company "drew" on the London and North Eastern Railway, and Gimbel Brothers bought a bill of exchange with which to pay their indebtedness to the Wedgwood Pottery Company. It should be obvious, however, that the British companies might have made the first move, the Wedgwood Pottery Company selling to the London bank a draft on Gimbel Brothers, and the London and North Eastern Railway purchasing from this bank a banker's bill of exchange with which to remit to the Remington Typewriter Company. There is no universal practice in the matter; in some instances the exporter will "draw" and in other cases the importer will take the initiative and settle the account by forwarding a bill of exchange. Whether one method or the other is employed depends upon the terms of the business transaction between exporter and importer.

It would be possible, of course, for importers always to meet their obligations through the purchase of banker's bills, thus obviating the use of commercial bills such as that employed in the transaction between the Remington Typewriter Company and the London and North Eastern Railway. The effect is the same whichever method is adopted. In every instance importers pay funds into banks of their respective countries, and exporters draw funds from banks, the exporters by selling claims upon foreign concerns and the importers by buying claims. If, then, the value of all goods exported from the United States to England is exactly equal to the value of goods imported from that country to the United States, American importers will pay into American banks handling foreign exchange, precisely the amount which American exporters will draw out. Likewise, the payments of English importers to British dealers in exchange will equal the withdrawals by English exporters. Under these

conditions, all payments necessitated by reason of foreign trade may easily be made without shipment of gold.

"Triangular Exchange." The settlement of international indebtedness is often a much more complicated matter than is suggested by the simple processes that we have described. We have referred, for example, to the fact that a country's imports are paid for, in the main, by its exports. But in the case of two countries, one may export to the other considerably more goods than it imports from that country. It would seem, in a case of this kind, that a great deal of gold would have to be transferred in order to make up the balance; and, of course, transfers of gold do take place. There are ways, however, to avoid the actual shipment of gold in many instances. An example of "triangular," or "three-cornered," exchange will illustrate this point.

There are some countries from which the United States imports a large quantity of goods, but to which it sends but few goods in return. We have already seen that in normal times we buy large quantities of silk from Japan, coffee from Brazil and Colombia, and rubber from the Malay Peninsula. In instances such as these (and especially when the import consists of raw materials from a rather primitive country), our imports from individual countries exceed our exports to these countries. On the other hand, we export to certain countries (as, for example, to England) more than we import from these specific countries. If we add to these facts the assumption that England exports to one of these countries (say, to Colombia) more than she imports, we have conditions such as form the basis of triangular exchange and make it possible to effect settlements without the use of gold.

Since American imports from Colombia materially exceed our exports to that country, while our exports to England are greater than our imports, there should be available in New York an abundance of London exchange, but little or no opportunity there to buy bills of exchange payable in Colombia. How, then, shall American importers settle their accounts in Colombia? And how shall English importers pay bills due manufacturers and merchants in the United States for shipments from America to England? The problem is solved by American importers purchasing, in New York, London exchange which can be used for the settlement of debts in Colombia. For London is a world clearing house for foreign exchange, and exchange drawn on a London bank is acceptable in virtually any part of the world. This London exchange originates through American exporters drawing on English importers and then selling these drafts to New York dealers in exchange. Therefore, American importers can pay for goods imported from Colombia by sending to Colombian business men the London bills that they have bought in New York.

The bills can then be sold by these Colombian exporters to other per-

sons in their country, who in turn have imported goods from England and are anxious to have drafts on London with which to meet their obligations. When the Colombian importers have settled their accounts with English exporters in this way, the exporters present the drafts for collection to the English importers of American goods (upon whom they were originally drawn), and when they are paid all obligations have been met. The several steps in the process are illustrated in Fig. 46, in which the arrows indicate the direction in which the drafts move, the goods moving, of course, in the opposite direction.

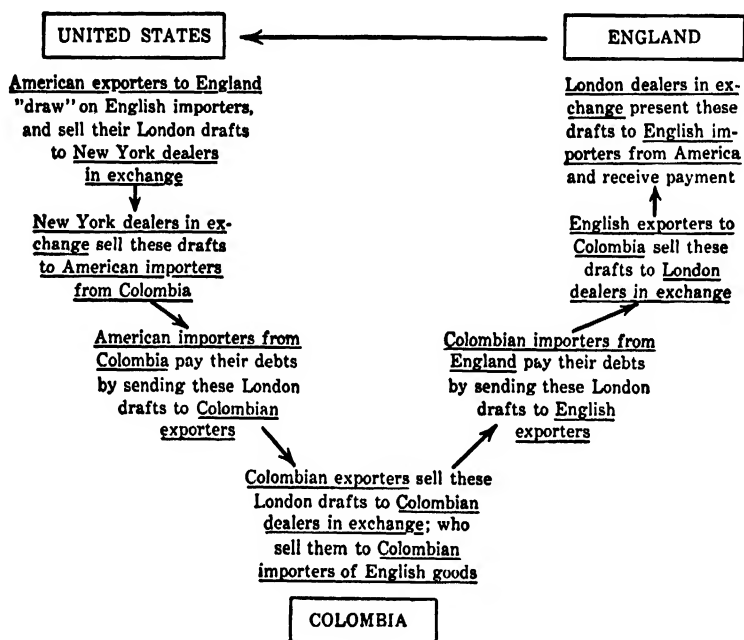


FIG. 46. AN EXAMPLE OF "TRIANGULAR EXCHANGE"

The Rate of Exchange. Naturally, the bankers handling foreign exchange make a charge for the accommodation; but this charge is paid willingly enough, since the use of foreign exchange makes it unnecessary to send gold overseas in settlement of indebtedness. The monetary unit of the United States is the dollar, and of England the pound sterling. Americans, of course, wish to be paid in either dollars or gold, and Englishmen in either pounds or gold. There is no difficulty about this, however, since the English exporter is in reality paid by the London bank in money which this bank has received from English importers. It is therefore British money, or pounds sterling. A similar situation exists in the United States, for American exporters receive from their banks American dollars that have been paid in by American importers who require

banker's bills with which to settle foreign obligations. This is true so long as exports and imports between two countries are equal.

There are times, however, when exports from the United States to England are either greater or less than imports from England. Let us suppose, for the moment, that they are greater. This means that American exporters are drawing from American banks more than American importers are paying in. In England, the situation is reversed; British importers, through their purchase of bills of exchange with which to pay obligations in America, are paying into English banks more than British exporters are drawing out, for British imports are greater than exports. If American exports exceed imports to a considerable extent, the quantity of London exchange for sale in New York (that is, bills of exchange payable in London in pounds sterling) increases, while at the same time (because of the relatively small imports) there is little call for these bills on the part of American importers.

Changes in Exchange Rates. Applying here the laws of price determination, which we have already explained in detail, we see that, because of the large quantity of London exchange offered for sale and the small quantity desired, the price must be low. London exchange in New York is said, under these circumstances, to be "at a discount," that is, it will sell below par. Moving quickly to England and viewing the situation from that angle, we find that there are many British importers anxious to buy New York exchange with which to pay American exporters. But New York exchange is scarce in London because there has been little exporting to the United States. As a consequence, New York exchange in London will sell "at a premium," or above par.

We can find the *par of exchange* by comparing the gold content of, say, the dollar and the pound sterling. A British pound sterling commands \$4.8665 in gold when it contains (as in 1931) 4.8665 times as much pure gold as the dollar. When exports and imports are at a par (that is, exactly equal in value) the *rate of exchange* between dollars and pounds will also be at par, and the American importer can purchase bills of exchange payable in London in pounds sterling, on the basis of \$4.8665 per pound, plus the dealer's commission.

But if exports from the United States to England are greater than imports, he will be able to buy London exchange at less than par, perhaps at \$4.85 per pound sterling. At this same instant, the British importer in London, seeking to purchase foreign exchange payable in New York in dollars, will discover that he must pay more than par for a bill of exchange, that is, for each pound sterling he will receive only \$4.85 worth of American dollars.

It should now be clear that an excess of American imports over exports will reverse the situation, and London exchange will, in New York, sell at a premium (say, \$4.88 per pound), while New York exchange in

London will sell at a discount; that is, a pound sterling will buy more than a normal amount of dollar purchasing power—\$4.88 worth, to be exact. The problem, then, is one of supply and demand. The price of foreign exchange is low when there is an abundance of it available, and the price is high when bills of exchange are relatively scarce.

"Gold Shipping Points." There are, however, heights and depths beyond which the price will not go. These are known as the "gold shipping points," and they represent deviations from par beyond which it will pay the importer to ship gold in payment of his foreign obligations. If the shipping costs of a pound sterling between New York and London (covering transportation, insurance, and all handling charges) are, say, two cents, then the American importer will refuse to buy London exchange if the price goes above \$4.8865, since it would be cheaper to ship gold than to pay a higher price for bills of exchange. Similarly, American exporters, in selling to American bankers their claims upon British importers, will not take less than \$4.8465 per pound sterling, for it would be less expensive to have gold shipped from England in settlement of their claims than to sell the claims at a figure smaller than the amount mentioned. When there are no obstacles to the free movement of gold, the rate of exchange is ordinarily held between the upper and lower gold shipping points. In actual practice, gold shipments are made not by importers who have obligations to meet, but by bankers who thus increase their balances abroad and then sell foreign drafts against these balances. However, the fact that importers *could* pay their bills by shipping gold prevents the rate of exchange from going beyond the gold shipping point.

PURCHASING-POWER PARITY

Thus far, we have been considering foreign exchange between countries that are on the gold standard. But nearly all of the countries that play important rôles in international trade have abandoned the gold standard, and there is no longer a free movement of gold between them. If two countries, one on a gold and the other on a paper standard, engage in trade, the exchange rates will no longer be anchored to the gold parity and may deviate widely from such parity. This is true because the departure from the gold standard eliminates the possibility of free gold movements. The statement holds also for trade between two countries both of which have departed from the gold standard. Because the exchange rates lose their connection with a gold parity, it does not follow that there is no parity, or "norm," about which the actual exchange rates will tend to fluctuate. Indeed, there is such a norm, which we call "purchasing-power parity," and which means that the parity of exchange is based upon the purchasing power, and not upon the gold content, of money.

Purchasing-power parity therefore is a ratio which expresses the relationship between the price levels of the two countries under consideration. It must be thought of as an *ideal* ratio, just as the gold parity of $\pounds 1 = \$4.87$ is an ideal ratio. But just as the *actual* rates of exchange frequently vary from the ideal when both countries are on the gold standard, so also may actual rates of exchange vary from purchasing-power parity when the trading countries have left the gold standard. As these lines are written, the pound is quoted at \$4.03. This is, of course, the *rate of exchange* at this particular time, and not necessarily the *par of exchange*.

Purchasing-Power Parity and Domestic Price Levels. When both England and the United States were still on the gold standard and the gold parity of $\pounds 1 = \$4.87$ was in actual force, this expression of the parity of exchange could be taken literally. *For $\pounds 1$ was a given quantity of gold, and \$4.87 was precisely the same quantity of gold.* When international trade was transacted upon this basis of exchange, what happened was that a quantity of economic goods valued in England at approximately 125 grains of gold nine-tenths fine¹ ($\pounds 1$) was sent to the United States in exchange for a quantity of economic goods valued in America at 125 grains of gold (\$4.87). Thus goods exchanged for goods, as they always must in international trade, either immediately or eventually. The ratio at which they exchanged was determined by the relationship between the *purchasing power of gold in England and in the United States*. Under purchasing-power parity, the ratio at which English and American goods exchange is likewise determined by the *relationship between the domestic price levels*—expressed now, however, not in terms of gold but in paper pounds and dollars, respectively. With both England and the United States on a paper monetary basis, the statement that $\pounds 1 = \$4.03$ means that the purchasing power of the paper pound in England is approximately the same as the purchasing power of \$4.03 (paper) in the United States. This exchange rate, then, is based upon the relation between the domestic purchasing powers of the two national currency units.

There is nothing surprising about the parity of exchange being based upon the purchasing power of money in the countries that issue it, for eventually the money must be spent in the countries of issue, if it is to be spent at all. Paper pounds are generally acceptable in England but not in the United States, and paper dollars in the United States but not in England. Hence, pounds must be spent in England and dollars in the United States. It follows that the value of the pound and the dollar must depend, in the final analysis, upon what they will buy in England and the United States, respectively. Let us suppose that these two countries, both being on a paper money basis, engage in international trade, and that all commodities and services purchased by the people of England in the United States are paid for in paper pounds, and that all goods

¹ In the interests of strict accuracy, it may be noted that British gold used for monetary purposes is eleven-twelfths fine, while American monetary gold is nine-tenths fine.

bought by Americans in England are paid for in paper dollars. It is obvious that trade could not stop at this point, since dollars in England and pounds in America lack general acceptability and are therefore but slightly useful. To be used to greatest advantage they must be returned to the country of issue and spent there for economic goods, and their usefulness will be measured by the quantity of goods they command in that country.

Speculation in Foreign Exchange. It should be noted, further, that speculation may enter into a situation such as we have described. If, for example, it appeared likely that we should soon have a rise in the price level of the United States without a corresponding rise in England, there would be a rush to convert dollars into pounds, in anticipation of the loss of purchasing power that dollars would suffer through an increase in general prices in the United States. This increased demand for pounds would alter the ratio of exchange, which might be expected to move to $\pounds 1 = \$4.25$, or to some other ratio indicating the enhanced value of the pound as compared with dollars. If a decline in the American price level were expected, with no change in general prices in England, we may be sure that Britishers would seek to buy up dollars while they were still relatively cheap. Their bids for dollar exchange would have the effect of raising the price of drafts payable in dollars, with the result that the number of cents obtainable for a pound would begin to move downward from the present 403, and might eventually get as low as (say) 375, when the rate of exchange would be $\pounds 1 = \$3.75$. If, on the other hand, the present *nominal gold parity* of $\pounds 1 = \$8.24$ were expected to come into force, there would be an immediate scramble to buy pounds while they were still available at \$4.03 in American paper money; and this scramble would cause the "\$4.03" of the present paper ratio to move in the direction of the \$8.24 which the pound would cost, once the new gold parity had been adopted.

Speculation takes place also in the foreign exchange of countries which are firmly established on the gold standard and make no effort to prevent the shipment of gold. Dealers in exchange, like dealers in any other commodity, will buy in anticipation of a rise and sell in anticipation of a decline in price. Consequently, there are always some people buying foreign drafts because they expect an increase in demand which will enable them to reap a profit, and others selling because they look for a decline in demand which would render their holdings less valuable than they are at present. However, the exchange rates of paper currencies offer a wider scope for speculative operations than the rates of gold standard currencies; for the latter, it will be recalled, can vary only between the gold shipping points, whereas the former are likely to fluctuate more widely.

THE BALANCE OF PAYMENTS

"Favorable" and "Unfavorable" Balances of Trade. We have yet to consider the contention that the exports and imports of a country tend to be equal, and to examine briefly the mechanism which brings about the equilibrium between exports and imports. In this connection, we shall find it convenient to make use of two terms which are met with continually in the literature of international trade. For many decades, economists have been writing about "favorable" and "unfavorable" balances of trade. Indeed, the terms originated at a time when it was considered decidedly advantageous for a nation to send abroad more goods than it imported, so that it might receive gold in payment of the balance. Of more recent years we have come to the realization that the acquisition of a very large quantity of gold is not necessarily a great blessing, but may bring about distinctly unpleasant consequences through its effects upon the credit-currency systems and the price levels of the countries sending and receiving the gold. Consequently, the terms "favorable" and "unfavorable," when used in connection with an international trade balance, are likely to be misunderstood. It would certainly be clearer to refer to an "excess of exports" or an "excess of imports"; but the other expressions have become so firmly fixed in our economic language that there seems to be small hope of ousting them.

The Long-Run Equalization of Trade. To many people, international trade appears to consist primarily of exports and imports of merchandise and services of the types listed in Items 1 to 8 of Table 43. Before the era of large-scale foreign investments, these were, of course, the items of greatest importance; and it was a commonplace among writers on economics that what a country exported in the way of such goods tended to equal its imports of these kinds. Even today, when long-term investments and changes in international banking accounts form an appreciable part of a country's exports and imports, it should be obvious that, although such "claims upon economic goods" may be acceptable temporarily in exchange for economic goods, yet they are acceptable only in the sense that they constitute deferred payments; and sooner or later the holders of these claims will expect to convert them into commodities and services.

If, then, a country—say the United States—maintains a "favorable" trade balance by exporting year by year more economic goods than it imports, and receiving in exchange for its excess of exports such claims upon foreigners as are represented by stocks and bonds, we may be sure that there will come a day of reckoning when the holders of these claims will call for payment. The direction of trade will then have to be reversed, for payment must eventually be made, if it is made at all, in economic goods. Moreover, payment will involve an *excess* of imports over exports, and the United States will then have a so-called "unfavorable" balance

of trade. This is but one more illustration of the fact that trade consists, at least in the long run, of an exchange of commodities and services for commodities and services.

Maintenance of Goods Balance Under the Gold Standard. The length of time required to balance exports and imports of economic goods cannot, of course, be predicted with anything approaching accuracy, but we may inquire into the method of bringing about this equilibrium. Let us suppose, for the sake of simplicity in explanation, that all international trade consists of economic goods, neglecting for the moment such items as long-term investments and changes in international banking accounts. Let us suppose, further, that the countries which engage in trade are all on the gold standard.

It is safe to say that people ordinarily buy in their own communities, and certainly in their own countries, unless there is an advantage to be had through purchasing in a more distant region. If, for example, Englishmen import goods from the United States, they do so because they can buy here to greater advantage than at home. This would mean, in all probability, that certain commodities and services were obtainable at lower prices in the United States than in England. Otherwise there would be no incentive to buy at so great a distance. Therefore, if American exports of economic goods should continuously be greater than imports, we should expect to find the cause in the lower prices that prevail in the United States for the goods desired by foreigners, and the high prices in other countries for goods which might be purchased by Americans except for the fact that they can secure them at lower figures right at home. But if the United States continued for a long time to have larger exports than imports, the balances year by year would be paid in gold; and this gold might be expected to increase the quantity of circulating media in the United States and thus raise the price level.

An increase in general prices would eventually make itself felt in international trade. For not only goods that are sold at home, but those entering into international trade as well, would advance in price; and, in the course of years, these goods would be offered only at figures which were prohibitive, so far as foreign purchasers were concerned. For just as the influx of gold to the United States would raise prices, so also its flow from other countries would lower price levels in those particular countries; and thus it would become increasingly difficult for American business men to quote prices which would induce foreigners to buy in the United States instead of at home. Indeed, we might expect prices in foreign countries to decline so greatly that American purchasers would be attracted, and as a consequence American imports for a time might exceed American exports. We have, then, in the movement of gold a device which tends to bring about an equilibrium between exports and imports of commodities and services. If the balance is upset to a very

considerable extent, so that the rate of exchange comes close to the gold shipping point, a movement of gold takes place which in time may be counted upon to restore the equilibrium once more.

Equilibrium of All Payments Under the Gold Standard. Having seen how exports and imports are balanced under the relatively simple conditions which we assumed to exist, we may now introduce the capital movements which are included in Table 43 under Items 9, 10, 11, and 12. Paper currency movements, listed as Item 15, are similar in character to these several capital items, since paper money is in reality a credit instrument. Item 16 consists of a host of things which, if we knew perfectly all details of the situation, could be distributed elsewhere in the table; and silver (Item 14) may be regarded as merchandise. Thus we can include among exports and imports every item in Table 43, with the single exception of gold; and gold, it should be observed, is customarily regarded purely as a means of settling balances in international trade, when the nations engaging in trade are on the gold standard, as they are under our assumed conditions. If, then, our international balance sheet were the one appearing as Table 43, we should find that (apart from gold shipped) the exports of *all items* (or credits) amounted to \$8,779,000,000, and the imports of *all items* (or debits), to \$4,035,000,000, requiring a net gold import of \$4,744,000,000 to bring the two into equilibrium. The gold transferred in 1940 represents, as we have explained, a far larger percentage of the total volume of transactions than in normal years.

Obstacles to the Automatic Attainment of Equilibrium. This shipment of gold, like the shipment mentioned in an earlier paragraph, might be expected to raise somewhat the price level of the country receiving it—the United States—and to depress somewhat the price levels of the countries losing it, thus tending to bring about a readjustment of trade which would bring exports and imports into balance. However, we cannot be certain that gold entering a country may not be “sterilized” (that is, kept by the central banking system from forming the basis of credit expansion), and thus be prevented from raising the price level. And it is also possible that the country losing gold may liberalize its policy of credit extension so as to keep the loss of gold from depressing its level of general prices. In the face of such credit manipulation, the readjustment to which we have referred might not take place promptly. However, it would not be possible to continue the shipment of gold in one direction indefinitely, without forcing off the gold standard the country whose stock of gold was being depleted. And once it had abandoned the gold standard, the value of its paper currency would soon fall and the direction of trade would be reversed. This statement does not apply to *gold-producing countries* which mine and refine year by year a sufficient quantity of gold to enable them to meet unfavorable trade balances in

gold without drawing upon the stocks of bullion needed for the support of their monetary and banking systems.

The Influence of Changes in Rates of Exchange. At this point we must emphasize the fact that the forces making for an equilibrium of exports and imports are at work all the time, and do not become active merely when the rate of exchange has reached the gold shipping point. It will be remembered that international payments are usually made through the medium of bills of exchange, and that a favorable balance of trade for the United States requires the people of other countries who are importing American goods to pay a premium when they buy dollar exchange, since the demand is great and the quantity available is relatively small. At this same time, and for the same reason, foreign drafts will sell at a discount in New York. For example, the discrepancy between exports and imports might be so great that dollar exchange would sell in London at as high a price as £1 = \$4.85. This high price charged for the means of making payments for American goods would in itself have a depressing effect upon exports from the United States to England, and the low price of sterling exchange in New York would stimulate imports from England to this country. It is evident, then, that fluctuations in the rate of foreign exchange tend to bring trade balances into equilibrium, and that the shipment of gold in settlement of balances takes place only after the rate of exchange has moved so far from gold parity as to reach the gold shipping point.

The Handling of Gold Shipments. It will be well also to explain more fully the statement, already made, that movements of gold, when they occur, are not handled by the importers of goods. This service is ordinarily performed not by the importers of goods, but by dealers in foreign exchange who, when the gold shipping point is reached, make a shipment of gold themselves and thus build up foreign balances against which they may write foreign drafts and sell them to those who must pay bills in foreign countries. On such drafts the dealers in exchange will naturally charge a premium which will reimburse them fully for the cost of shipping the gold, and yet will not make the total cost to the buyer higher than the cost which would be entailed if he undertook to pay his foreign obligations by shipping gold himself. Furthermore, if there is a probability that gold will soon move in the opposite direction, the additions to foreign balances referred to above may be made through a credit transaction instead of a gold shipment, since it would obviously be silly to send gold to England only to have it promptly returned. Credit transactions of this kind appear in the international balance sheet as changes in international banking accounts (Item 10 in Table 43).

Maintenance of the Trade Balance Under Purchasing-Power Parity. When countries engaging in international trade are not on the gold

standard, any shipment of gold which takes place is regarded as a merchandise transaction and not as a means of balancing exports and imports. Under purchasing-power parity, the balance of payments is maintained wholly through fluctuations in the rate of exchange. But whereas, under a gold standard, the fluctuations cannot go beyond the gold shipping points but give way at these points to the shipment of gold as a force making for equilibrium, under purchasing-power parity they know no definite limits and will extend as far as may be necessary to effect a balance between total exports and total imports. If we assume, for example, that with England and the United States on a paper monetary basis the *normal* rate of exchange (that is, the *par of exchange*) is £1 = \$4.03, we can readily see that a favorable balance of trade for the United States would, as in our gold standard illustration given above, place a premium upon dollar exchange in England. This premium, as we have explained, would tend to turn the tide of trade; if it did not succeed in so doing, a still higher premium would be charged, and the price of dollar exchange would continue to rise until exports from the United States were sufficiently discouraged and imports to the United States were correspondingly encouraged. There can be no question that a long-continued rise in the price of dollar exchange, and a consequent decline in sterling and other foreign exchange, would finally bring about an equilibrium between exports and imports.

The *par of exchange* (gold parity) of the currencies of two countries, both of which are on the gold standard, is the ratio of the *gold contents* of these two currencies, expressed in monetary terms.

The *par of exchange* (purchasing-power parity) of the currencies of two countries which are not on a common metallic monetary standard, is the ratio of the *purchasing powers* of these two currencies in their respective countries of issue.

The *rate of exchange* of the currencies of two countries is the *actual market price* of each currency in terms of the other.

1. Why is gold generally acceptable in international trade transactions, whereas paper money is not?
2. To what extent was gold used in the settlement of international payments in 1940 (Table 43)?
3. Why do we wish to avoid the use of gold in making international payments?
4. What device used in our modern "clearing houses" is utilized for reducing materially the necessity of shipping gold for the settlement of international obligations?

5. Show, with an illustration, how several international business transactions might be "settled" without the shipment of gold, and also without the assistance of dealers in foreign exchange.
6. What are the difficulties involved in a settlement of this kind?
7. Introduce dealers in foreign exchange into the illustration used in your answer to Question 6, and trace the operations that must be gone through before the settlement is completed.
8. How do dealers in foreign exchange build up "foreign balances," and how are these balances reduced from time to time?
9. Why is it sometimes desirable to employ "triangular exchange"?
10. Follow, step by step, the transactions outlined in Fig. 45. Is this process, in basic principle, different from that shown graphically in Fig. 44?
11. Indicate the manner in which the use of foreign exchange enables a creditor to receive payment in the money of his own country.
12. Define "parity of exchange."
13. Under what conditions will foreign exchange sell "above par"? "Below par"? Are your answers consistent with the statement that the problem of exchange rates "is one of supply and demand"?
14. What are "gold shipping points"? Why do rates of foreign exchange tend to remain within these limits?
15. Explain the meaning of "purchasing-power parity."
16. Under what conditions is parity of exchange based on purchasing power instead of on the gold content of money?
17. What is a "favorable" trade balance? An "unfavorable" trade balance?
18. Is a favorable trade balance necessarily desirable, and an unfavorable trade balance undesirable?
19. Does the statement that "there is a tendency for exports to equal imports" relate to merchandise alone, or to other items as well?
20. How do you explain the fact that foreigners sometimes buy goods in the United States, when similar goods are made and sold in their own countries?
21. Why would it be undesirable for a country to attempt to maintain a "favorable" trade balance indefinitely?
22. What have price levels to do with the maintenance of trade balances?

REFERENCES FOR FURTHER READING

See list of references at the end of Chapter 38.

Obstacles to International Trade

IN CHAPTER 38 WE LOOKED INTO THE NATURE OF INTERNATIONAL TRADE AND saw that it consists, in its essence, of an exchange of the commodities and services of the people of one country for the commodities and services of the people of other countries. The purpose of the individual exporter, in sending goods to foreign lands, may be to sell these goods for money. But, from the point of view of the nation as a whole, the purpose of exporting is to make it possible to import.

If, as should now be clear, the object of engaging in international trade is to obtain goods which can scarcely be produced at home, or can be produced abroad more advantageously than at home, how may a nation gain most from its trade with other nations? Will it be by sending to other countries as many commodities and services as possible, while receiving few in return? Will it be, in other words, by giving every possible encouragement to exportation while seeking by artificial means to keep imports at the lowest possible ebb? Obviously not. We should seek, as a nation, to get as many commodities and services as possible from other countries, while giving to other countries as few as possible. From the point of view of the nation, then, *we gain from international trade through importing*. And those who regard international trade as an opportunity to sell goods for money may be reminded that our ability to export is limited by our willingness to import, since the imports of a country as a whole must in the long run equal its exports.

The Case for Free Trade. The case for free trade is the case for the world-wide geographical specialization of labor. If every country specialized in those lines of production in which its effectiveness is greatest, the resources of the world as a whole would be used in the most productive way. The result would be the production of the greatest possible total of all commodities and services. When these economic goods were distributed on the basis of free trade, each nation would obtain a greater sum total of enjoyable goods than would be available through any other process.

RESTRICTIVE DEVICES IN INTERNATIONAL TRADE

The Prevalence of Restrictive Trade Policies. While we should not rate highly the intelligence of an individual who tried to gain economically

by giving away as much economic goods as possible in return for as little as possible, many nations have tried to gain by the adoption of a similar policy. That is, in spite of the weighty arguments for freedom of trade, most nations have adopted policies which greatly restrict imports, and hence the international exchange of goods. Particularly after World War I was it true that large numbers of nations, whether or not they were formerly worshipers at the shrine of restrictionism, adopted protective tariffs and other restrictive devices.

The Protective Tariff. Under a protective tariff, certain goods produced abroad are made dutiable at rates designed to exclude these products, thus leaving the home market free for exploitation by domestic producers turning out the same kinds of goods. If, for example, a certain grade of cloth can be obtained from England for 25 cents a yard but cannot be produced in this country for less than 35 cents, then a duty of, say, 15 cents a yard is levied upon this grade of cloth, so that our wants will be satisfied by domestic manufacture, if satisfied at all. When similar duties of varying amounts are applied to hundreds or thousands of articles, the result is a "protective tariff." Many rates are more than sufficient to exclude the foreign products, while others are, in effect, low enough so that imports continue to come in to some extent despite the duties. But the purpose of the protective tariff is clearly the exclusion of foreign goods.

The Use of Subsidies. Besides the protective tariff, other measures are taken by nations to control the volume and direction of international trade. Some of the results of a protective tariff can be obtained by using subsidies, which are direct governmental grants to specified industries. When the government pays an industry a given amount on each unit of its output, the industry can sell its product at a price lower than full costs of production. This low price for the domestic product makes it difficult for foreign producers to compete with domestic producers, and relatively easy for the subsidized industry to sell in foreign countries, other things being equal. The price a government pays to maintain a subsidy is readily ascertainable, so that it is clear just which industries are being favored and to what extent. Subsidies have not been an important instrument of trade policy in the United States.

Indirect Protection. Domestic industries may also be protected by sanitary regulations applied to imported food products, veterinary laws, regulations requiring that imported goods bear a distinctive mark indicating their country of origin, and regulations governing the granting of public contracts, which specify that domestic materials must be used or require materials to come up to certain specifications. All of these measures may have legitimate and nonprotective uses, but they may also be designed to discriminate against foreign goods. When the cost of marking a product to indicate the country of origin is greater than its original cost of production, or when the specifications made in public contracts are such that

only domestic producers can meet them, these measures may be quite as effective as a tariff in protecting home industries. In the United States, the Pure Food and Drugs Act, the Meat Inspection Act, and the Horticultural Quarantine Act have operated in some cases to furnish such protection.

The Use of Import Quotas. Import quotas have been used to protect domestic industries chiefly since 1930, and came to be employed in more than a score of countries. Their use involves laws or executive decrees which limit (by value, quantity, or weight) the imports of certain articles that may enter the country in a specified period of time. The countries using this device may have both maximum and minimum quotas for individual exporting countries, or they may give special concessions to countries which grant similar concessions in return. The regulations governing import quotas vary widely as between countries in the methods of allocating the quotas among countries which export the specified articles, the time periods in terms of which the quotas are stated, the units in which the quotas are stated, and the base periods on which the quotas rest.

Import quotas may be more effective than tariffs in protecting domestic industries. Normal tariff rates may lose their effectiveness when foreign currencies are being devalued rapidly, when other countries are dumping goods abroad at unusually low prices, when other countries are granting subsidies to their exporting industries, or when there are great disparities among other countries in the cost of production of certain goods. In such cases, a tariff may fail to exclude imports, and import quotas may provide surer protection. A protective tariff, once enacted, is difficult to change, but import quotas are flexible. On the other hand, import quotas, unlike import duties, do not provide revenue, and are more likely than a tariff to disrupt existing international trade relations. Even more important, perhaps, is the fact that import quotas cause goods to move between countries under governmental permit, instead of moving under the influence of price-cost relationships.

Foreign Exchange Controls. Many countries, in recent years, have used foreign exchange controls to regulate the total volume, specific content, and direction of their international trade. Foreign exchange controls usually operate through a central system for clearing foreign exchange bills. The central bank of the country, or a special agency created for the purpose, is given the power to establish buying and selling rates for bills of exchange, and to deal in foreign exchange. Another agency (perhaps the ministry of commerce or finance) parcels out available supplies of foreign exchange among importers. Exporters of the country are required to demand foreign currencies for goods exported, and to sell their exchange to the central authority which sells it again, to approved importers, at a profit.

Foreign exchange is sometimes allotted on the basis of priority lists,

exchange being granted to importers of foods, raw materials, partly processed materials, and finished manufactures on the basis of the importance and desirability of classes of imports as indicated by the priority lists. In addition to such priorities, some goods may be placed on a free list, so that they can be imported at any time, while others may be completely banned and the use of foreign exchange for their importation forbidden at all times. Sometimes foreign exchange is allocated on the basis of the countries from which importers wish to bring goods, so that trade may continue to be divided among countries in the proportions which prevailed before exchange control was established. In certain importing industries, trade associations may be allowed to allot foreign exchange to individual importers, or individual importers may be allowed to share the foreign exchange allotted to a given industry on the basis of relative imports in some past period.

Like the import quotas discussed above, foreign exchange controls are a more flexible instrument of trade policy than protective tariffs. They may be very useful in emergency situations, and their results are more definite and more easily controlled than those of protective tariffs. On the other hand, foreign exchange controls are complicated and expensive to administer, they often lead to favoritism to particular industries or companies, and are particularly likely to divert trade from its natural channels and upset existing trade relations. Foreign exchange controls are not simply a device for protecting domestic industries. They may be used to stop the movement of gold from a particular country, to stabilize exchange rates, to prevent an outflow of capital, to make sure of obtaining necessary imports, to serve as a bargaining tool in international relations, or for other purposes. Usually, however, they are employed to limit and restrict the volume of international trade, and frequently they give protection to domestic industries.

Blocked Accounts. Foreign exchange controls may serve to bring current imports and exports into balance, but sometimes a country which imposes such controls may be heavily in debt to other countries and may have to make large annual payments on account of interest and principal. When such a debtor country cannot expand its exports and is unable or unwilling to decrease its imports sufficiently to allow these outgoing payments to be made, its government may direct that the payments be made to banks in the home country but forbid their transfer to the creditor countries. These "blocked accounts" may then be used by their owners for various purposes *within the debtor country*—to pay for travel or study, to make investments in real estate, securities, or business enterprises, or to purchase goods for export. Thus, the blocked accounts are another device for lessening pressure on the international trade, the supply of foreign exchange, and the gold reserves of the country.

Clearing Agreements. Trading countries sometimes enter into clearing agreements to provide for the settlement of commercial obligations as a whole. A fixed exchange rate between the monies of the two countries is agreed upon, and a governmental agency is set up in each country to handle trade transactions. Importers then pay the domestic authority of their country for goods imported, instead of paying the exporters of the other country, while exporters receive payments from their domestic authority and not from foreign importers. In this way, the obligations arising from trade are settled within each country, and the use of foreign exchange is avoided so long as the total imports and exports of the countries are kept in balance. While clearing agreements are ostensibly used to expedite the payment of foreign obligations, it is obvious that the governments engaging in these agreements are thus enabled to control the volume and content of their international trade, and afford protection to domestic industries. Clearing agreements may also contain provisions for the settlement of outstanding debts between the countries, or separate payment agreements may be drawn up for this purpose.

Restrictionism as a World Policy. Since territorial division of labor and freedom of trade would bring the greatest sum total of enjoyable commodities and services to the world as a whole, it is true that restrictive measures are a tremendous source of economic loss when considered from this point of view. They cause the resources of the various nations of the world to be used, in many instances, in lines of production to which they are ill adapted, and the gains which would result from the application of the principle of geographical division of labor are thus lost. The result is a much smaller total amount of goods for the world as a whole than the maximum which could be obtained. But the people of different nations do not often or seriously consider world advantages or disadvantages. Personal or local advantages are usually the prime considerations of immediate importance, and national advantage is thought to be the ultimate goal to be attained.

THE PROTECTIVE TARIFF AS A NATIONAL POLICY

Until the outbreak of World War II the protective tariff was the only device of any great importance used by the United States to control international trade and protect domestic industries against foreign competition. Therefore our analysis of restrictionism as a policy for a single nation will be conducted in terms of the protective tariff, but many of the arguments and conclusions which are developed will apply also to the various other restrictive devices which have been in general use.

The Protection of "Infant Industries." One of the earliest and strongest arguments for the protective tariff has to do with the encouragement

of young industries. So far as other countries have advantages over us in production which rest upon natural conditions, there is little that can be done about it. But, in the early days of a country, many advantages in production possessed by other countries are of the acquired sort; that is, the foreign industries are temporarily more productive because of the advantage of an early start and years of practice in these lines of production. To accept this condition as natural and permanent, and to buy the products of these industries from foreign countries continually, may be to disregard the young nation's best interests. For it may well be that, if the young and temporarily inefficient industries are protected from foreign competition for a time, they will develop in size and efficiency until their products can be turned out more advantageously than those of other countries. Clearly, a nation should produce goods at home whenever it is more advantageous to do so than to obtain them from other countries, and it is anticipated in the case of infant industries that the gains to be realized after the industries have grown up will be more than sufficient to compensate for the losses sustained while protection is necessary.

This argument is, therefore, valid to some extent, but its validity is weakened by two circumstances. In the first place, it is impossible to decide with accuracy in advance just which industries will eventually become strong and self-sustaining. The policy of the United States has been to grant protection whenever it was asked, and it is certain that some of the industries protected must have been greatly stimulated by our tariff. On the other hand, it is equally certain that some industries have been kept alive up to the present which should have been permitted to die a peaceful and natural death a hundred years ago. Such industries have always been dependent upon the tariff for their existence, and in all probability always will be. The second circumstance is that industries, however great and efficient they may become, never feel that they are sufficiently grown up to relinquish tariff protection and face foreign competition. The steel industry in the United States, for example, would be considered by most persons a particularly lusty infant, and yet it has not insisted that it be allowed to make its way in the world without protection. Whatever may have been the validity of the infant industry argument in the past, it is certain that for the future it must carry very little weight.

The Home Market Argument. Ignorance or disregard of the basic principles of international trade enables protectionists to advance what is called the "home market argument." It is contended that the exclusion of foreign products from the country will leave the home market entirely to domestic producers, thus giving them a new market in addition to that which they already enjoy. Production and employment will be stimulated, it is said, and wage conditions improved. But it is a fundamental principle of international trade that the exports of a country must equal its imports in value over a period of time, and that if a country will not import, it

cannot continue to export. To the extent that the protective tariff shuts out imports, our exports must eventually suffer, and the home market is built up only at the expense of the foreign market. The home market may be slightly the more desirable of the two, or it may be less desirable. The question is not one to be decided in an offhand manner. In any case, however, no large additional market can be created by the tariff.

Wages and the Tariff. The most effective argument for protection, from the point of view of obtaining from the people of this country a sufficient number of votes to authorize the continuance of the policy, has to do with the effect of protection on wages. At times it has been held that the protective tariff is the cause of high wages. Does not the tariff permit the protected enterprisers to charge higher prices than they could otherwise charge, and do not the higher prices lead to higher wages for the workers? This line of reasoning puts the cart before the horse. According to the theory of opportunity costs, enterprisers in protected industries have to pay, for units of the factors of production, prices which are as high as these factors can command in other industries. The combination of the factors of production in the industries requiring protection, however, is for some reason not so effective as in other industries, so that the products of the former cannot be turned out at prices which will admit of effective competition with similar foreign-made products. As a result, these industries need a tariff because it will permit them to charge higher prices than could be obtained in competition with the industries of other countries, and it will enable them to continue producing while paying the current prices for the factors of production. Since the market rate for labor is more than could be afforded in these industries if the tariff were not in effect, it is true in a sense that the protective tariff has the effect of bolstering up wages in these particular fields of business.

There is, however, no reason to suppose that higher wages will be paid for labor of a given grade in protected industries than elsewhere, or that wages in general will be raised by the tariff. The relatively high level of wages in this country depends upon the relatively high effectiveness, or productivity, of labor. Wherever the productivity of labor is high, wages tend to be high, regardless of the policy used in international trade. The United States glories in the possession of a comparatively high level of both money wages and real wages under a protective system, and yet England has been second only to us in both respects under a system which until recently has been practically free trade. It would be most heartless of us to allow any of our people to live in misery and want because of insufficient earnings, if their condition could be improved by the simple expedient of enacting a higher protective tariff. That it could not be so improved reduces the high-wage argument to an absurdity. Our conclusion, then, must be that the most probable effect of the tariff on wages

is to reduce real wages by causing the prices of many commodities to be higher than they would be without the tariff.

Protecting the American Standard of Living. Many people in this country believe firmly that, though high wages are not caused by the protective tariff, the maintenance of a high level of wages and a good standard of living depends upon the tariff. The argument runs along these lines. The wages and the standard of living of workers in this country are high, and we take pride in the fact. But our enterprisers, because they pay high wages to these workers, necessarily have high costs of production and are rendered unable to compete under conditions of free trade with the enterprisers of other countries, who can secure their workers for much lower wages. Under the protective tariff, the cheap goods made by foreign "pauper laborers" are shut out, and our wages and standard of living can be maintained. If the barrier were once let down and a flood of cheap goods came into this country, our own enterprisers would be compelled to shut down and throw men out of work, or else keep their plants running by reducing wages to a point which would make the maintenance of the American standard of living impossible.

The flaw in this argument lies, of course, in the statement that high wages necessarily mean high costs of production. This statement seems unquestionably true to most persons who receive wages and to many others, and yet it is not necessarily true at all. No accurate estimate of labor cost can be made unless two facts are known: (1) the rate of wages paid, and (2) the amount of work turned out for the wages. High wages and large productivity of labor may very well mean low labor cost, while low wages and very low productivity of labor often result in a high labor cost. The truth of this statement can be established by reference to facts which are familiar to all. Money wages in the United States are the highest in the world. If high wages necessarily mean high costs of production, how does it happen that we can sell commodities to the value of billions of dollars a year (\$4,021,000,000 worth in 1940) to the people of foreign countries? Why, with their low wage rates, can they not undersell us in everything? The answer is that our workers turn out so much product per unit of wages that costs are in reality low, not high, in these lines of production.

Does a country with a high wage level and standard of living have anything to fear from free trade with a country having a low wage level and standard of living? We think not. England with high wage rates and standard of living engaged in trade for many years on a basis of free trade with China, where these labor conditions are exactly reversed, but there was no noticeable tendency to drag English laborers down to Chinese wages and standard of living, or to raise Chinese laborers to the English level. It is important, then, to remember from this discussion that high wages and satisfactory living standards are dependent upon high effective-

ness or productivity of labor, rather than upon the maintenance of a protective tariff.

The Tariff and Employment. The contention that the protective tariff increases employment is related to the high-wage and home-market arguments. If we shut out foreign products, it will be necessary to produce our supplies of these goods in this country, and we shall have more industries than otherwise. These industries cannot run without laborers and there will be much additional employment created for our working men. This argument, of course, disregards the familiar fact that if we will not import, we cannot continue to export. As men are put to work producing the goods which are no longer purchased abroad, other men are thrown out of employment in industries producing for the export market. The effect of the whole process is to shift large amounts of capital, labor, and land to the production of goods which could be obtained more advantageously from abroad, instead of using these factors in our export industries where they are especially productive. No large, additional source of employment is created by the tariff. We do, by erecting tariff barriers, make it more difficult for us to obtain the goods we desire, but that is a doubtful advantage. We could also "increase employment"—that is, provide more hours of work—if we impeded production by equipping our workers with ball-and-chain or handcuffs, but apparently our protectionists have overlooked the possibilities of this procedure.

The Protection of Vested Interests. It is sometimes thought necessary to continue the policy of protection, once it is begun, even though some other policy would be more desirable if we were to begin over again. The reason given is that, under the guaranty of the tariff that foreign competition will be excluded, individuals have made large investments in protected industries and workers have adapted themselves to conditions in these lines of production. If protection is not continued, all of these individuals will suffer losses. It will be seen, however, that this is not an argument for the protective tariff, but, rather, one against the abrupt removal of protection. Economists generally would concede that the reductions in protection should come gradually, rather than suddenly, but they hold that in any event reductions must be made.

The Tariff as an Instrument of National Preparedness. When no other argument prevails, protectionists of the old school fall back upon the necessity for national preparedness. Under a system of free trade, the United States would be largely dependent upon other nations for certain commodities, and would be subject to the ever-present danger of having her supplies of these products cut off in time of war. Let us, then, maintain the protective tariff, and thus insure within this country the production of as many essential products as possible, say these protectionists. What if this policy does mean that, to a certain extent, our productive resources will be used ineffectively, and a smaller sum total of com-

modities and services than the maximum will be produced, just so long as our national security is promoted? This argument, of course, admits the direct uneconomic effects of protection and, in addition, falls short of the mark in another respect. To try to become a self-sufficing nation is to follow a narrow nationalistic policy, and the instrument of this policy, the tariff, is a very prolific source of international ill feeling and friction. Though it may be admitted that it is a serious matter when our supplies of important commodities are cut off in time of war, we may go still further and recognize the fact that when nations cooperate with and are dependent upon one another on the basis of freedom of trade, the likelihood of war is lessened to a marked degree.

Protection Against Dumping. In recent years the protective tariff has come to be supported on grounds which appear to be quite different from those which are described above. The tariff is advocated, for example, as a protection against the dumping of foreign goods in this country. "Dumping" is the term used when the practice is carried on by the people of other nations. When we ourselves engage in such practices, we regard them merely as good business. Dumping has been variously defined, but one useful definition describes it as the sale of goods at a lower price in one market than in another. If, for example, a French perfume sells at the equivalent of twenty dollars an ounce in France, and is marketed in the United States by its producer for ten dollars an ounce, dumping is taking place. Dumping is not a new source of worry for Americans. Indeed, our first tariff to contain any considerable element of protection was passed shortly after the War of 1812, largely because of the expressed determination of British producers to sell goods in this country for any price they would bring, or even to give them away if need be, in order to stifle the young industries which had sprung up in America and thus recapture our market for themselves.

The consideration of dumping gives us an interesting sidelight on the attitude of Americans toward foreign products. If the foreign products are offered at higher prices than those at which identical products could be turned out in this country, we are often inclined to purchase the articles from abroad as being of superior quality, or for some other reason. To offer us goods at the same prices for which they could be produced here is considered reprehensible, and our suspicions are at once aroused. If foreign producers plumb the depths of infamy by offering to furnish us certain products more cheaply than we could produce them ourselves, we begin to look for the "pauper laborer" in the woodpile and enact a tariff to protect ourselves from this threat to our economic welfare. Finally, to include the worst possible case, if foreigners should offer to give us certain goods free of charge, we would probably go to the extreme of cutting off all trade relations with the offending countries.

Since everyone is presumably interested in getting as many commodities

and services as possible at the smallest possible cost, why do we object to the sale of goods to us by the people of foreign countries at very low prices? It is because of the fear that this process will not be continued indefinitely. The sale of goods at these low prices might go on so long that we would become dependent upon others for them and give up their domestic production, only to find the prices raised later above the level at which the goods could be produced in this country. For this reason it is considered well to avoid goods which are offered on suspiciously favorable terms. However, dumping can be guarded against without continually maintaining high duties which permit the mulcting of domestic consumers.

The Tariff and Economic Stability. The argument that the protective tariff may be of benefit because it promotes economic stability is close kin to the home market argument. It has been admitted that the tariff may be used to preserve the domestic market for American producers at the cost of reducing our foreign markets to a similar extent, but it was not at all clear that this result would be advantageous. The economic stability argument holds that the domestic market is definitely more desirable, because it is more stable. "Let us produce and consume by ourselves to a large extent and shut out disturbing influences. The result may be, of course, that we shall have a smaller sum total of commodities and services to enjoy than otherwise, but may it not be better to have a smaller flow of goods, if the flow is more constant?"

Our answer to this question may well be favorable, as is anticipated by those who advance the argument, but it is at once necessary to ask whether economic stability can actually be obtained by this policy. To what extent is our economic instability the result of importing from and exporting to foreign countries, and thus likely to be affected by the tariff? It is extremely doubtful whether the major factors in the problem of economic instability will be much affected by the tariff policy. Even though foreign supplies of various products are excluded from the domestic market, it will still be possible, unless domestic production is controlled, for our producers to turn out larger amounts than will be taken by consumers at prices sufficiently high to enable the producers to recover their costs of production. The demand for different goods will not be controlled by a protective tariff and can vary as in the past. Neither can the tariff prevent an overextension of credit in this country. It will consequently appear to most observers that there is room within a country such as the United States for a considerable degree of economic instability, even if outside influences could be shut out.

The Scientific Tariff. Since the early years of the twentieth century there has been much talk about the true principle of tariff-making, which is that the tariff rates should be just high enough to cover the difference between foreign and domestic costs of production. No favors or special

privileges would be granted to domestic producers. Indeed, the tariff would be used only to guarantee a fair contest between foreign and domestic producers, according to its sponsors.

This principle, as it is ordinarily presented, sounds very fair and reasonable, but it will not bear close examination. In the first place, it would be difficult, if not impossible, to ascertain the domestic and foreign costs of production of a wide variety of articles. It is a sufficiently troublesome problem to obtain an approximation of domestic costs, and even greater difficulties are encountered abroad, where information of this sort is considered strictly private and is almost invariably withheld from investigators. Great expenditures would certainly be necessary to secure any worth-while information, and whatever data were obtained would probably be out of date before they could be used as the basis of tariff legislation.

Moreover, even if the principle could be strictly followed, the result would be disheartening. Trade is beneficial because it enables us to obtain goods more cheaply than we could produce them for ourselves. The effect of a tariff in equalizing costs of production would be to remove and destroy all the advantage which exists for us in international trade. Therefore, such trade would be wiped out so far as the United States is concerned. Then, too, let us consider what would happen in this country. All commodities would be protected and all that were consumed by us would be produced here, whatever the cost might be. If the commodity in question were bananas, the procedure would be to find out how much more it would cost to produce them here than in Central America, and then apply a tariff rate sufficiently high to equalize costs of production. The result, so far as most consumers were concerned, would be to raise their price to a prohibitive figure. If the good in question were rubber, silk, or coffee, the same procedure would be followed.

It might be argued that no one would favor carrying the principle to such extremes, but it is difficult to say just where it would stop. We have records of speeches by United States Senators in which they state that they would be willing to see duties of 300 or 400 per cent applied, if necessary, in order to accomplish the purpose of the tariff. But if we are to go as high as 400, then why not to 800, or to 2000 or 3000 per cent? Moreover, one Senator has favored the draining of the Everglades of Florida so that certain semi-tropical products might be raised there; thus it may be seen that the protection of the commodities mentioned in the preceding paragraph is quite within the range of possibility. All in all, the "true principle" of tariff-making is a ridiculous and worthless one.

Conclusion on the Tariff as a National Policy. Although the argument in the present section has been conducted in terms of the United States, as being of greatest interest to American readers, the conclusions which have been reached will apply, changing as conditions change, to other

countries as well. The benefits that have been claimed for the protective tariff have been seen to exist largely in the minds of those who find it desirable to support protectionism for some other reason than the reasons they advance. Where benefits have resulted, it is usually true either that they do not continue into the present, or that they could have been obtained more economically by some other method.

The losses under protection are beyond question. The productive resources of each country are diverted from industries in which they would be especially productive to other lines in which their employment is relatively ineffective. The desired commodities and services are obtained under difficulties, and the sum total of goods available for the enjoyment of the people of the country is smaller than otherwise. This ill treatment of all the citizens as consumers results in gains for some enterprisers, but not for others. If the higher prices that can be charged under the protective tariff are just sufficient to enable producers to continue in business in these ineffective industries, then (under conditions of competition) each factor of production will receive payment at the going rate and no more, and the loss to many persons in terms of higher prices will not be compensated by the gains to others. In other cases the tariff will allow prices to be sufficiently high to permit profits, and sometimes very large profits, to the owners of the protected businesses. It is axiomatic, however, that they never gain as much in profits as the people on the whole lose as consumers. In any event, this is taxation or exploitation of the many for the benefit of the few. Whether or not some individuals profit from the use of the protective tariff, it is to be condemned severely on economic grounds. And, of course, the same general conclusions must be reached with respect to the use of other devices for restricting international trade.

PROTECTIONISM IN THE UNITED STATES

The United States as a Creditor Nation. Having concluded our general discussion of protectionism as a national policy, we must now note that, as a practical matter, the use of this policy by the United States has been particularly unfortunate in recent decades. In the middle of the last century, this country was experiencing an "unfavorable balance of trade," that is, there was an excess of merchandise imports over exports. This condition arose, in part, from the fact that the country was a borrowing or debtor nation at the time. So long as we continued in that rôle there was little outspoken criticism of our tariff by other countries. People interested in collecting from debtors seldom discriminate against them, or interfere with their chances of becoming prosperous and able to pay their debts. But after the beginning of the last quarter of the nineteenth century our trade balance and credit position changed. During and after World War I our loans to other countries were tremendous,

and the United States took a commanding position as a creditor nation.

At the close of 1930, the private investments of the United States in foreign lands were estimated at \$14,900,000,000 to \$15,400,000,000,¹ and the discounted value of the debts of other nations to the government of the United States amounted to \$7,000,000,000. Our loans and investments abroad were not made in the form of money, but consisted of economic goods. If the loans were to be repaid, if our investments abroad were to be retrieved, and if we were to receive income from our loans and investments, the payments had to be made to us not in money, but in commodities and services. If other countries were to pay the United States, say, \$500,000,000 in a given year, it was necessary for their exports to exceed their imports by this amount. By the same token, we could receive such a payment only by allowing our imports to exceed our exports by the same amount.

In the face of a desire to collect our debts and the knowledge that the payments had to be made in the form of commodities and services, we twice raised our tariffs against imports after World War I and thus made it increasingly difficult for other countries to send us goods. Our Tariff Act of 1922 gave us the highest level of tariff duties in the world, except for one other country, and decidedly the highest among the important industrial nations of the world.² The Tariff Act of 1930 was no improvement, for a study of comparative ad valorem rates in the two Acts based upon imports for consumption in 1928 showed an increase in the average rate of duty from 33.22 to 40 per cent, so far as items were comparable in the two Acts.³ This high tariff policy was clearly inconsistent with our position as an outstanding creditor nation.

The Changing Nature of Our Exports. In the more distant past, foreign countries protested but little against our tariff policy, not only because the United States was a debtor nation, but also because our exports consisted predominantly of raw or semi-manufactured products which these countries greatly desired and against which they would not discriminate. Since the beginning of the last quarter of the nineteenth century, the trend in our exports has been away from raw and partly finished products toward manufactured goods. These are goods which can be obtained from other countries as well as from the United States, or can be produced in the countries to which we export them at only slight differences in cost in many cases. Consequently, every upward revision of

¹ United States Department of Commerce, "A New Estimate of American Investments Abroad," *Trade Information Bulletin No. 767*, Washington, Government Printing Office, 1931, p. 1.

² The League of Nations, Economic and Financial Section, International Economic Conference, *Tariff Level Indices*, Geneva, The League of Nations, 1927, especially p. 16.

³ The United States Tariff Commission, *Comparison of Rates of Duty in the Tariff Act of 1930 and in the Tariff Act of 1922*, Washington, Government Printing Office, 1930, p. 1.

our tariff has tended to bring in its wake a host of discriminations and retaliations against the United States. Of course, other countries do not ordinarily discriminate openly against our products, or enact tariff laws which are avowedly retaliatory, because our President has been given wide powers in dealing with goods from countries which clearly practice discrimination and retaliation. But it is not difficult to read between the lines of the changing trade policies of other countries.

The Difficulty of Changing the Tariff. In spite of the apparent desirability of changing our policy with respect to international trade, it seemed almost impossible, up to the middle of the 1930's, to alter the prevailing sentiment in favor of the protective tariff in the United States. Many millions of our people are classed as wage earners, and these workers had been carefully "educated" in the matter of the tariff over a long period of time. That the protective tariff brings with it "high wages and full dinner pails" was to many workers much more than a mere political campaign myth. It was to them a tradition, a religion handed down from one generation to another, and did not appear to be open to argument. The responsibility for the development and maintenance of this belief is easy to place.

The Influence of the Press. The tariff views of the workers as a class were largely the result of the news items and editorials of newspapers and the speeches of politicians. For many people the newspaper is the one and only form of literature, and certainly the only available printed medium of information on the tariff problem. Most of the newspapers with which one came in contact, and particularly those in the great industrial centers where large numbers of workers are found, were staunch supporters of our tariff policy. To their editorial pages the worker, if his belief in the tariff had been shaken by hard times, might turn with every assurance of seeing repeated the familiar fallacies upon which was built his belief in the benefits of protection. Even in depression, he would find there assurances that the tariff was the foundation of our prosperity in the past and is our only hope for the future. Surely, those who depend upon the editorials of the average newspaper for an understanding of the principles of international trade must always remain in almost complete ignorance of the subject.

The Speeches of Politicians. The speeches of men in political life, as heard directly or over the radio, or as reproduced in the newspapers, also greatly influenced popular opinion on the tariff. For many years, both major political parties were in accord in favoring the protective tariff in principle, although they disagreed somewhat about particular schedules. Political talks on the tariff were almost universally worded in terms of the ancient fallacies with which we are now familiar, and yet they proved convincing to most wage earners and to many others. The candidate for public office would say, "Vote for me. My party stands for

the protective tariff, and the tariff is the cause of all your prosperity." People would flock to his standard. If the same man had said, "Vote for me, because my party stands for the protective tariff, and the tariff is the cause of the heavy rains which have brought you relief from the drought from which you have been suffering," these same people would have laughed at him. And yet the tariff would ordinarily be as truly responsible in the one case as in the other.

Students often ask, Were our political figures, our Senators, and our Congressmen so ignorant of the principles of international trade that they really believed the arguments they advanced about the tariff, or were these contentions made for a purpose? While many of the arguments were no doubt made in all sincerity, it seems very unlikely that all of our political leaders were really deceived by some of the absurd statements about the tariff, unless it is true that a man can repeat a thing so often that, despite its falsity, he eventually comes to believe it himself.

Senators and Representatives are elected from states and from districts within states. Since the interests of the people as consumers are rarely considered in Congress, the business of each member of that body with regard to the tariff is to get as many favors as possible for the business interests of his district. Some businesses within a district might be making large profits behind the tariff wall, others might be dependent upon the tariff for their very existence, and still others might not be concerned at all about it. In any case, the attempt was usually made to obtain protection for all. Many cases are on record of industries receiving a generous measure of protection where none was asked. Tariff advantages for one district could be obtained by members of Congress only by co-operating with other members desiring favors for their own districts. Whatever the method used, each member had to look out for his own district, or powerful support would be withdrawn from him and at the next election he would be likely to find himself one of the represented, instead of being himself a representative. Many tariff speeches were doubtless made as a justification of the actions of the members, and for popular consumption at home, to convince those who were not convinced and to reassure those who were.

The Attitude of Business Men. The one discordant note in the hymn of praise for protection was the fact that many American business men were coming to view the tariff with doubt and fear. Of course, those whose businesses were dependent upon the tariff for large profits, or for their very existence, quite naturally continued to favor the policy of protection. Almost anyone in the same position would feel the same way. If a man knows that a certain policy is vital to his own interests, it is extremely easy for him to discover that this same policy is of the utmost importance for the welfare of the country as a whole.

On the other hand, the policy of protection was opposed by many

of our great bankers, who sensed that restrictions on imports were great obstacles to a continuation of our foreign investment policy and to the development of New York City as an international financial center. Farmers, too, were coming to suspect more and more strongly that they had little to gain and much to lose from continued attempts to "protect" them. Finally, the owners and managers of industries which were efficient in their own right, which did not depend upon the tariff, and which were able to meet world competition, were beginning to oppose the protective tariff. Being able to meet competition, these industries were anxious to develop their exports further and gain the markets of the world, but they found themselves greatly hampered in their efforts because we refused to accept imports freely and thus made it difficult for the people of other countries to buy from us.

RECENT DEVELOPMENTS IN TRADE POLICY

The Reciprocal Trade Agreements. The Tariff Act of 1930 did not restore prosperity in the United States, but our international trade almost disappeared in the years immediately following its passage. By 1934 the Congress of the United States was ready to enact a law which seemed destined to go far toward modifying our tariff policy. This measure, called the Reciprocal Trade Agreements Act, authorized the President to enter into reciprocal commercial agreements with other countries for the purpose of fostering international commerce. In such agreements, the President could modify existing import duties and other restrictions in return for similar concessions from other countries. He could not, however, increase or decrease any duty by more than 50 per cent, or transfer articles from the dutiable to the free list or vice versa. The agreements could be consummated only after giving reasonable public notice of the intent to negotiate with the other countries, after holding public hearings at which those interested could express their opinions about the prospective agreements, and after seeking information and advice from the United States Tariff Commission and the Departments of State, Agriculture, and Commerce.

The policy expressed in the Act was pursued actively during the next ten years, and agreements were drawn up with twenty-seven countries, including Great Britain, Belgium, Sweden, Switzerland, Cuba, Canada, France, Czechoslovakia, Iran, Iceland, and a number of South and Central American countries. It will not be feasible for us to consider the details of these trade agreements, but we may examine briefly those concluded in 1938 with Great Britain and Canada. Under these agreements, the United States received tariff cuts or other concessions from Canada with respect to 1489 products, and from Great Britain with respect to about 450 products. Canada and Great Britain, in return, received conces-

sions from the United States on about 450 and 150 products, respectively. The agreements affected American exports which in 1937 were valued at about \$440,000,000, and American imports amounting to some \$260,000,000 in that year.⁴ In signing her agreement with the United States, Great Britain acted for Newfoundland and about fifty nonself-governing colonies. At that time the United States transacted about one-third of her total foreign trade with the areas included in these agreements, and the three countries together (the United States, Great Britain, and Canada) accounted for almost one-third of the world's total international trade.

Appraisal of the Reciprocal Trade Agreements. It is impossible to determine the exact effects of the reciprocal trade agreements upon the international trade of the United States. To do so would require a comparison of our actual volume of trade in several years with the volume which would have been transacted in the absence of the trade agreements—and the latter, of course, is an unknown quantity. Our international trade is subject to so many influences that one cannot single out the specific effect of the trade agreements. Some people argue that our trade with all countries was probably affected in the same way by the general recovery of business and insist that, if our trade increased faster with agreement than with non-agreement countries, the influence of the agreements is indicated. However, this is not necessarily true. Our trade with Germany, for example, may have been reduced by resentment felt here over that country's handling of the Jewish people, her default on financial obligations, or her general program of aggression. American trade with Japan may have been similarly affected at one time by our attitude toward her invasion of China and her treatment of Americans in the war area, and may later have been increased by her heavy purchases of war materials and supplies. Since Germany and Japan were both non-agreement countries, failure to consider these matters would result in giving our trade agreements with other countries more or less credit than they deserve.

With such cautions in mind, we may note that our imports from countries with which we had trade agreements increased 22 per cent between 1934-35 and 1938-39, whereas imports from non-agreement countries increased only 12½ per cent. Over the same period our exports to countries with which we had trade agreements increased 63 per cent, and exports to non-agreement countries increased only 32 per cent.⁵ It seems probable, therefore, that the trade agreements had a stimulating effect on our international trade, though its exact extent cannot be measured. Of course, any influence of these agreements on our trade was completely obscured during the period of World War II.

⁴ *The New York Times*, November 18, 1938, and *Chicago Tribune*, November 17, 1938.

⁵ *The Department of State Bulletin*, Washington, United States Department of State, January 26, 1947, p. 162.

On general grounds, the trade-agreements program deserves approval. The agreements reduced tariff duties or made other concessions where these actions would do us the most good and tended to increase trade. Since it seemed impossible to get many nations to lower trade barriers at one time, reciprocal trade agreements probably provided the best means available at the time for increasing international trade by reducing trade restrictions. The objections to the trade agreements came more largely from small business men than from our major industries. Small business men, who had no hope of developing foreign markets, were disturbed by the increased importation of foreign products. In addition, our tariff-minded politicians and newspaper writers made a determined effort to convince the farmers of the country that the trade agreements were detrimental to agricultural interests. The farmers were told, at one time, that our imports of cheddar cheese had increased fifteen-fold under the auspices of our trade agreement with Canada. The implication was, of course, that they had been badly injured by this development, but the tellers of the tale forgot to add that, even after the increase mentioned, these imports amounted to only 2.2 per cent of the domestic production of cheddar cheese. Similarly, the farmers were urged to protest against great increases in our imports of cream, though these imports amounted, after the increase had taken place, to only one-tenth of one per cent of domestic production.⁶ In the field of manufacture, alarm was expressed over the trade-agreements provision which permitted the importation of 4,800,000 pairs of shoes a year from Czechoslovakia, although these imports, if actually achieved, would have amounted to only 1¼ per cent of our domestic output.

Wartime Controls over International Trade. After the reciprocal trade agreements program had been in effect five years, World War II broke out, the United States becoming involved in the conflict late in 1941. Wartime conditions brought great increases in the extent to which the international trade of the United States was controlled by the federal government. Even before this country entered the war, our government set out to accumulate stock piles of certain strategic and critical materials, and entered into agreements with various Latin American countries, for the purchase of all their available supplies of such materials. Moreover, after December 27, 1941, the government assumed complete control over the imports of a number of materials and these things could be imported only by some governmental agency.

Our foreign trade was affected also by the "freezing" of foreign assets. The freezing process was based on an Executive Order administered by the Federal Reserve Banks and the Treasury Department, and it prohibited all transactions within the jurisdiction of the United States in which the country (or its nationals) to which the order applied had any

⁶ *Foreign Affairs*, April, 1938, pp. 428, 429.

interest, after a stipulated date. The freezing process, first used in April, 1940, was extended to country after country as German conquests continued, to Germany and Italy themselves in June, 1941, and to Japan in July, 1941. Naturally, all imports and exports between the United States and any country whose assets had been frozen were automatically prohibited, unless our government saw fit to issue licenses for specific transactions. This was true also of transactions between countries with frozen assets and any third country, if the transactions were to be financed by means of foreign credits held in the United States.

The freezing orders as such were not applied to the Latin American countries, but something of the same effect was produced by the promulgation in July, 1941, of the Proclaimed List of Certain Blocked Nationals. This list contained the names of persons and firms believed to be nationals of or sympathizers with the Axis countries, and located in countries of the western hemisphere. Our government forbade all business and financial transactions between citizens and residents of the United States and listed persons and firms, unless specifically permitted by licenses issued by the Treasury Department. The United States had considerable cooperation from Latin American countries in carrying out this policy, which was aimed quite definitely at depriving the Axis powers of any economic advantages they previously derived from enterprises, investments, and business connections in Latin America.

The exports of the United States were also subjected to direct control during the war period. In July, 1940, the National Defense Act provided for a general system of export control by means of licenses. This export control system was originally intended to apply to essential raw materials, machine tools, certain chemicals, arms, ammunition, and war goods in general. However, the list was increased rapidly, and soon scarcely anything included in our normal list of exports could be exported without a federal license. The export control system prevented other countries from buying here raw materials and goods which were needed in our war program, but permitted us to send all kinds of goods to countries of the western hemisphere which were collaborating with the United States in her war program. Even before our entry into the war, export control enabled us to interfere with and hamper the war activities of the Axis nations.

Finally, the lend-lease policy of the United States had an important effect on our trade. This policy was provided for in the Act to Promote the Defense of the United States, which was passed in March, 1941. This Act authorized the President to sell, transfer title to, lease, lend, or otherwise dispose of various defense goods to other countries whose defense was deemed vital to the safety of the United States. Defense articles in this connection included (1) weapons and munitions of war, (2) machinery, facilities, tools, materials, parts, and supplies necessary to the production, maintenance, and repair of war weapons and goods, and (3) any agricul-

tural, industrial, or other commodity or article for defense. The Act specified that lend-lease aid could be given under any terms and conditions which were satisfactory to the President, and that the resulting benefit to the United States could be payment in kind or property, or any other direct or indirect benefit which the President deemed satisfactory. From March 11, 1941, to August 31, 1946, lend-lease aid to our allies amounted to over 50½ billion dollars, with the British Empire receiving \$31,368,000,000, or almost 62 per cent of the total, and Russia \$11,267,000,000. In the same period, reverse lend-lease, or contributions of the allied nations to the United States, amounted to about 7⅞ billion dollars.⁷

International Trade of the United States in Wartime. Clearly, the various governmental controls we have been describing did not all make for a decline in the total volume of our international trade. Some policies, such as the lend-lease program and the over-all purchasing agreements for strategic and critical materials, tended to increase trade. As a result, the total volume of the international trade of the United States, in terms of merchandise, increased year by year from 1939 to 1944, as is shown by

TABLE 47. INTERNATIONAL TRADE OF THE UNITED STATES, 1939-46
(In millions of dollars)

(Source: *Survey of Current Business*, February 1947, p. 42.)

Year	Exports	Imports	Total Trade
1939	\$ 3,177	\$2,318	\$ 5,495
1940	4,021	2,625	6,646
1941	5,147	3,345	8,492
1942	8,035	2,745	10,780
1943	12,965	3,381	16,345
1944	14,259	3,919	18,178
1945	9,806	4,136	13,942
1946	9,738	4,934	14,672

the data in Table 47. The expanding total volume of trade in this period was largely the result of sharply increasing exports; and lend-lease exports of war goods, foods, and industrial materials played a very important part in increasing our total exports. In 1943, for example, the total exports of \$12,965,000,000 included \$10,440,000,000 of lend-lease exports, whereas in 1944 lend-lease exports amounted to \$11,305,000,000 out of total exports of \$14,259,000,000.⁸ After 1944, our total volume of international trade fell off considerably, though it still remained very high when judged by pre-war standards.

The Bretton Woods Agreement. While World War II was still in progress, preliminary steps were taken to lay the foundation for a revival of international trade after the war. In July, 1944, representatives of

⁷ *The Chicago Tribune*, November 18, 1946.

⁸ *Survey of Current Business*, February, 1947, p. 42.

forty-four nations met at Bretton Woods, New Hampshire, and drew up the famous Bretton Woods Agreement, which provided for two international financial institutions—the International Monetary Fund and the International Bank for Reconstruction and Development. The Agreement had been ratified by forty-five nations by the end of 1947. In this chapter, we shall consider only the International Monetary Fund, leaving the affairs of the International Bank for discussion in Chapter 41.

The International Monetary Fund. The purposes of the Fund are (1) to promote international monetary cooperation through a permanent institution; (2) to facilitate the expansion and balanced growth of international trade; (3) to promote exchange stability, to maintain orderly exchange arrangements among members, and to avoid competitive exchange depreciation; (4) to assist in the establishment of multilateral systems of payments between members and in the elimination of foreign exchange restrictions; (5) to make the Fund's resources available to members in order to correct maladjustments in their balance of payments without resorting to measures destructive of national or international prosperity; and (6) to shorten the duration and lessen the degree of disequilibrium in the international balances of payments of members.

On the basis of its membership at the end of 1947, the Fund will have a total capital of about $7\frac{1}{2}$ billion dollars. The United States will make the largest contribution ($2\frac{3}{4}$ billions), followed by the United Kingdom, China, France, and other nations. Each member nation must express the par value of its currency in terms of gold or United States dollars. Having established such a par value for its currency, a nation may change this par value by 10 per cent simply by notifying the Fund. Any further change, however, can be made only with the consent of the Fund's management, and an unauthorized change in the value of a nation's currency may result in the suspension of the nation from the use of the Fund, or even its outright expulsion. Currencies of the nations will exchange at the values set, except that rates of exchange may vary within one per cent of the official ratios.

With the Fund in operation, nations will collect for exports and pay for imports through bills of exchange, as usual. However, if a nation runs short of exchange balances to make payments in another nation, it can purchase the other country's currency from the Fund. If France, for example, needs Mexican pesos to pay for imports, she will pay francs into the Fund and secure the pesos she needs. There are, of course, limitations on this process. No nation may buy the currencies of other countries through the Fund in any one year to an amount in excess of 25 per cent of its original contribution to the Fund; and the Fund may set a limit beyond which it will refuse to sell a nation any more of the currencies of other nations until the first nation has made a readjustment of its affairs.

The point is that, when a nation has to buy foreign currencies from the

Fund, it has been buying abroad more than it has been selling, and is slipping into debt. Limitations on its purchases of foreign currencies through the Fund are expected to induce it to "clean house." It can put high import duties on luxuries, and use its limited foreign exchange to purchase necessary imports. It can put pressure on its citizens to seek out markets for exports, to work harder and increase efficiency, and so on. As a result, the nation will probably sell more and buy less, and thus acquire the foreign currencies that it needs.

On the other hand, if a nation persistently sells more than it buys in international trade, and other countries have to buy its currency through the Fund, the Fund's supply of that nation's currency will become short. This is especially likely to happen to the United States in the post-war period. In such an event, the management of the Fund will officially recognize the shortage, borrow currency from the nation whose currency is becoming scarce, purchase the currency for gold, or proceed to ration the limited supply of the currency among the nations which desire it. The Fund may also issue a report setting forth the causes of the shortage and making recommendations designed to bring it to an end. A representative of the member country whose currency is involved will participate in the preparation of such a report. Under the operation of the Fund, the United States or any other country cannot continue exporting if it will not import, and it will be under pressure to lower its tariff so that more goods will be imported or to seek out opportunities for making worthwhile loans in other countries. Either of these developments would place more of the scarce currency at the disposal of the other countries.

The member countries may use the resources of the Fund for capital transactions of reasonable amounts required for the expansion of exports, or in the ordinary course of trade, banking, or other businesses, or to effect capital movements which are met out of a member's own resources of gold and foreign exchange; but such capital movements must be in accord with the purposes of the Fund. A member cannot use the Fund's resources to effect a large or sustained outflow of capital, and the Fund may request a member to exercise controls to prevent this use of its resources or may even declare an offending member ineligible to use them.

Under the operation of the Fund, international trade situations which in the past have led nations to abandon the gold standard, depreciate their currencies, institute foreign exchange controls, and set up barter arrangements for dealing with other countries are expected to be resolved by orderly readjustments of the countries' economic affairs. At the same time, a temporary upset or disequilibrium in a country's international balance of payments can be provided for at stable exchange rates through the Fund. The result should be a larger volume of international trade and the stabilization of international monetary relations.

Each member country must agree that it will not (1) impose restrictions

on the making of payments and transfers for current international transactions, (2) engage in any discriminatory currency arrangements or multiple currency practices except as authorized by the Fund, or (3) cooperate with any non-member country in any manner contrary to the provisions of the Fund agreement. Each member country is obligated to furnish such information as is necessary for the effective discharge of the Fund's duties. This information might cover any nation's holdings of gold and foreign exchange, gold production, gold imports and exports, total imports and exports of goods, capital transactions, price indexes, and international investments and obligations. Any member may withdraw from the Fund at any time by transmitting a notice in writing to the Fund at its principal office, and the Fund may declare a member ineligible if it fails to fulfill any of its obligations.

The Fund is to be controlled and managed by a Board of Governors, Executive Directors, a Managing Director, and a staff. All powers of the Fund are vested in the Board of Governors, which has a position similar to that occupied (in theory, at least) by the stockholders of a corporation. Each member country appoints one Governor, and each Governor is entitled to cast 250 votes, plus one vote for each \$100,000 of his country's original contribution to the Fund. There are twelve Executive Directors, of whom five are appointed by the five countries making the largest original contributions, two are selected by American republics other than the United States, and five are chosen by all other member countries. The Executive Directors are similar to the board of directors of a corporation. They will supervise the general operation of the Fund, and exercise the powers and carry out the functions assigned them by the Board of Governors. The Managing Director, selected by the Executive Directors, holds a post similar to that of the president of a corporation. His task is to carry on the ordinary business of the Fund and to supervise the work of the operating staff.

The Board of Governors and the Executive Directors were duly appointed and held their first meetings in March, 1946, and May, 1946, respectively. The Managing Director was selected by the Executive Directors on May 6, 1946. Par values based on existing rates of exchange had been established for 31 member countries by early 1947. The member countries were called upon for a part of their scheduled contributions to the Fund late in 1946, and the United States had paid its contribution in full by February 26, 1947. In June, 1947, the Fund was said to be just coming into operation,⁹ and its membership had reached a total of 45 countries by August, 1947.

The Economic and Social Council of the United Nations. Another recently developed organization which may exert an influence on inter-

⁹ *The Department of State Bulletin*, Washington, United States State Department, June 22, 1947, p. 1236.

national trade in the post-war period is the Economic and Social Council of the United Nations. Declaring it to be the intent of the United Nations to promote (1) higher standards of living, full employment, and conditions of economic and social progress and development, and (2) solutions of international economic, social, health, and related problems, the Charter of the United Nations, drawn up at the San Francisco Conference in 1945, provided for the creation of the Economic and Social Council. This body will be composed of representatives of eighteen nations, chosen for three-year terms by the General Assembly of the United Nations. The Council will sit continuously, and may become a very important division of the United Nations, since the solution of international economic and social problems would go far toward the prevention of war.

The Council may make or initiate studies and reports with respect to international economic, social, cultural, educational, health, and related matters, and may make recommendations with respect to any such matters to the General Assembly, to the Members of the United Nations, and to the specialized agencies concerned (such as the United Nations Food and Agriculture Organization, the International Monetary Fund, the International Bank for Reconstruction and Development, the International Labor Organization, and the United Nations Aviation Organization). It may prepare draft conventions for submission to the General Assembly, with respect to matters falling within its competence, and it may call, in accordance with rules prescribed by the United Nations, international conferences dealing with such matters.

The Council may enter into agreements with the specialized agencies referred to above, defining the terms on which any agency concerned shall be brought into relationship with the United Nations. It may coordinate the activities of the specialized agencies through consultation with and recommendations to such agencies and through recommendations to the General Assembly and to the Members of the United Nations. It may take appropriate steps to obtain regular reports from the specialized agencies, and reports on the steps taken to give effect to its own recommendations and to recommendations on matters falling within its competence made by the General Assembly.

The Council may furnish information to the Security Council, and shall assist the Security Council upon its request. It shall perform such functions as fall within its competence in connection with the carrying out of the recommendations of the General Assembly. Finally, it may, with the approval of the General Assembly, perform services at the request of Members of the United Nations and of the specialized agencies, and shall perform such other functions as are assigned to it from time to time by the General Assembly.

The functions of the Economic and Social Council obviously are stated in very general terms. However, if the Council is to try to find solutions

for international economic problems and to promote higher standards of living, full employment, and economic progress, it will have to be concerned with international trade, restrictions on trade, international monetary relations, and international credit and investment transactions. If the Council decides that tariff walls and other restrictive devices are limiting world trade and indirectly causing unemployment and business failures, it may well seek the scaling-down or elimination of these restrictive devices. However, there is a paragraph in the charter which forbids the United Nations to deal with anything that is entirely a domestic affair of a Member, and it remains to be seen just what matters will eventually fall into this category.

The Economic and Social Council had also shown strong signs of life by the end of 1947. We may note, in particular, that it had appointed a Preparatory Committee, consisting of representatives of 18 nations, to pave the way for the establishment of an International Trade Organization of the United Nations. The Committee met in London late in 1946, in New York early in 1947, and in Geneva from April to August, 1947. At these meetings the original draft proposal for the Charter of the I.T.O., prepared by the United States, was brought to its final form.

The Charter aims at contributing to the improvement of standards of living throughout the world by promoting the expansion of international trade on the basis of multilateralism and nondiscrimination, by fostering stability of production and employment, and by encouraging the development of backward areas. It contains very important provisions with respect to trade restrictions, state trading, intergovernmental commodity agreements, and international investments. A United Nations Conference on World Trade and Employment met at Havana, Cuba, beginning November 21, 1947, to agree upon and recommend the Charter of the I.T.O. to the governments of the participating nations. Action on the Charter by the governments of the individual nations, and of course the actual functioning of the I.T.O., remained matters for the future.

Conclusion. Much praise and criticism had been heaped upon the international organizations which we have been describing long before they started to function, but an effective appraisal of them can scarcely be made until they have functioned for several years. Their success will clearly depend, to a great extent, upon the spirit and intelligence with which they are operated; for experience indicates that it is impossible to set up foolproof organizations for the stimulation of international trade or the stabilization of international finance. If the organizations operate successfully in these fields, we may eventually see the happy day when the story of the benefits of restrictionism will be pulled down from the shelf of works on economics and placed among the fairy tales where, for the most part, it indubitably belongs.

1. "International trade, like domestic trade, is fundamentally barter." Explain.
2. Why does the economist contend that the imports of a country must equal its exports over a period of time?
3. How would the absence of trade restrictions tend to maximize the gain which the nations of the world could derive from international trade?
4. Explain the general nature of a protective tariff.
5. "Domestic industries may be protected indirectly as well as directly." How?
6. Why may import quotas be more effective than protective tariffs in certain situations? Explain.
7. How may foreign exchange controls be operated to afford protection to domestic industries?
8. "Foreign exchange controls may be set up for many purposes but they often restrict trade and protect domestic industries." Do you agree? Why or why not?
9. Discuss the relative merits of foreign exchange controls and protective tariffs.
10. Compare clearing agreements with foreign exchange controls proper.
11. Could we, by means of the tariff, monopolize the domestic market and maintain our export trade at the same time?
12. "The superiority of one country over another in a branch of production often arises only from having begun it sooner. There may be no inherent advantage on the one part, or disadvantage on the other, but only a present superiority of acquired skill and experience. A protecting duty, continued for a reasonable time, may permit the country which lacks this skill and experience to carry on the industry until the producers are educated up to the level of those with whom its processes are traditional." Comment on this argument for the protective tariff.
13. "We are importing at the rate of about \$300,000,000 worth of foreign goods per month into the United States. Most of these goods could be made here. There is not a manufactured article produced in the United States in which the labor cost is less than 90% of the total cost following the raw material from start to finish. Now, if that is true, of the \$300,000,000 that we are sending abroad each month to buy foreign-made goods, \$250,000,000 is going out from the people of the United States to employ German, French, English, Japanese, and Chinese labor, while our own workers walk the streets in idleness. Unless adequate protection is secured against foreign-made goods, there is little hope of this country being able to maintain the present standard of living of the American workingman and woman."

Is this a valid argument for the protective tariff? Why?
14. Is the protective tariff effective as an instrument for shielding a country from outside economic influences and for promoting economic stability? Why?
15. Would the efforts of nations to be economically self-sufficient be more or less likely to promote world peace than would the economic cooperation and interdependence of these nations? Why?
16. What is meant by the "scientific tariff?" Explain. Would you favor a tariff law of this kind? Why?
17. "The use of the policy of protectionism by the United States has been particularly unfortunate in recent decades." Explain.
18. Explain fully why it has been so difficult in the past to obtain a general downward revision of our tariff.

19. State the major provisions of the Reciprocal Trade Agreements Act of 1934.
20. "The reciprocal trade agreements program has been condemned as being too effective." Explain.
21. Show why the effects of the reciprocal trade agreements program on our international trade are difficult to measure.
22. Describe the additional governmental controls which were applied to the international trade of the United States during World War II.
23. Did our wartime controls have the effect of sharply reducing the volume of our international trade? Explain.
24. What are the objectives of the International Monetary Fund, and how is the operation of the Fund expected to lead to their attainment?
25. "Rigid adherence to the provisions of the agreement concerning the International Monetary Fund is likely to modify the policy of the United States with regard to international trade." Explain.
26. How is the operation of the International Monetary Fund supposed to make for a larger volume of international trade and the stabilization of international monetary relations? Explain.
27. Discuss the possible significance of the Economic and Social Council of the United Nations and its functions in relation to international trade.

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Foreign Investments and International Indebtedness

WE BEGIN OUR STUDY OF THE PROBLEMS OF FOREIGN INVESTMENTS AND international indebtedness by examining the general principles on which international loans and investments, and exports and imports of capital are based.

THE ECONOMIC EFFECTS OF A NET OUTFLOW OR INFLOW OF CAPITAL

The Meaning of an "Export of Capital." In considering the process by which international indebtedness is incurred, we should recognize that, in speaking of international movements of capital, the word "capital" is being used in a somewhat different sense from that in which it is ordinarily used by economists. Its usual definition is "produced goods intended for further production"; that is, capital is a part of those scarce, material, and transferable goods that are commonly called "wealth." When borrowing takes place between nations, however, the capital that is imported and exported consists, in the first place at least, of purchasing power or claims upon wealth, rather than articles of wealth themselves.

What happens whenever the individuals or governments of foreign nations obtain loans in the United States—or, to look at it from the other point of view, whenever we make investments in foreign securities or properties—is that purchasing power, such as bank deposits, formerly owned by people in this country is turned over to foreigners or foreign governments. A part of this purchasing power must be spent in the United States for the banking services in connection with the loan, while another part may be spent here if this country appears to be the most advantageous market for the particular commodities desired by the borrowers or if the terms of the loan provide that a certain part is to be spent here. It usually happens, however, that a considerable part of such loans is—for a time at least—wanted by the borrowers in some other form than commodities and services. Even though, in the last analysis, the borrowers in many cases will want commodities and services, their immediate desire is usually to

obtain most of the loan in the currency of their own country, to be used there, or to obtain commodities and services from some country other than the one that extended the credit.

The borrowers' problem, then, becomes that of transferring purchasing power from the lending country to their own country. This may be accomplished by having their agent in the lending country use their credit balances to buy bills of exchange on the borrowing country and send them to the borrowers, or by themselves drawing bills of exchange against their balances in the lending country and selling the bills at home. Conceivably, their balances in the lending country could be used to buy gold there, which could then be transferred to the borrowers.

A Persistent Net Capital Outflow and the Foreign Exchange Market. When a country has a persistent net outflow of capital, the problem of transferring the funds becomes serious. The borrowers' attempts to convert the funds by buying bills of exchange in the lending country add to the already existing demand for drafts on the borrowing country or on other countries not directly involved in the lending. On the other hand, their attempts to transfer funds by selling at home bills of exchange on the lending country add to the supply of such exchange already existing in the borrowing country. Since the increased demand in the lending country for exchange on the borrowing country, and the increased supply in the borrowing country of exchange on the lending country, would persist because of the continuing loans, the effect would be to raise in the lending country the exchange rate on the borrowing country and lower in the borrowing country the exchange rate on the lending country. These changes in exchange rates seem likely to result ultimately in a flow of gold from the lending to the borrowing country, although other conditions may intervene to render this flow unnecessary during a greater or lesser period of time.

For example, it is probable that dealers in foreign exchange in the lending country can set up credit balances in the borrowing country through short-term advances by the banks there, and can sell additional exchange on the borrowing country by drawing bills against these balances. It is also entirely possible that the central bank of the borrowing country may intervene and offer to give the borrowers funds in the borrowing country in exchange for the claims against credit balances held by the borrowers in the lending country. The purpose in doing this, from the central bank's point of view, may be to prevent an inflow of gold when such a flow appears undesirable because of conditions either in the borrowing country or in the international credit situation, or to obtain foreign exchange which may be counted as a part of legal banking reserves in some countries. Either type of banking activity, however, will be indulged in only so long as it appears desirable with regard to banking,

reserve, and gold conditions at home and abroad; and when these activities cease, a flow of gold tends to take place.

The Effect on International Trade. If the flow of gold toward the borrowing country, because of a persistent capital movement, is so large and so long-continued that the lending country's credit base is reduced and the quantities of money and deposit currency in use are curtailed, there tends to be a decline in the general price level. On the other hand, the price level in the borrowing country tends to rise under the influence of the increases in money and deposit currency that have resulted from the borrowing process. So far as the fall in prices in the lending country makes its goods appear cheap to other countries, it becomes a good place in which to buy and its exports become large in relation to its imports, since the commodities of other countries seem expensive as compared with the goods obtainable at low prices at home. On the other hand, the borrowing country, with its high prices, becomes a highly desirable market, while it is able to sell only comparatively small quantities of its commodities and services in other countries. As a result of this situation, the borrowing country comes to have an "unfavorable" balance of trade, while the lending country has an export surplus.

However, it is known that even substantial transfers of gold between countries do not necessarily alter their respective price levels. But whether the price levels change or not, the results may be much the same, for there is likely to be, in any case, an expansion of purchasing power in the borrowing country. The expansion may be extensive, since the country's banking reserves are increased by the inflow of gold, or by the acquisition of foreign exchange which is counted as reserves in some countries. The increase in the monetary demand for economic goods in the borrowing country is likely to stimulate production (and speculation), but a part of the purchasing power is likely to be used for importing products from other countries. Moreover, some part at least is likely to have the effect of increasing the exports of the lending country, either directly, or indirectly by way of another country or countries.

Qualifications and Conclusions. This description of the effects of a persistent net outflow of capital from a particular country has been presented as simply as possible. Page after page of qualifications have been written on the theory described above. These qualifications concern such questions as the differences between domestic, import, and export prices when the general price level is rising or falling, the effects of lending upon countries not directly involved, and the influence upon trade relationships of such economic phenomena as dumping, international cartels, and tariffs and other obstacles to trade. The conclusion to be drawn from the discussion is that, when a country is experiencing a persistent net outflow of capital, its exports of commodities, services, and gold tend to be large as compared with its imports, while the reverse is true of the

borrowing country. This import-export relationship in the lending country may come about through an increase in exports while imports are unchanged, by a decrease in imports while exports remain constant, or by changes in both.

A Persistent Net Inflow of Payments on Account of Long-Term Indebtedness. International loans, however widely some may appear to differ from others, are all alike in one respect, in that they make it necessary for payments to pass from the borrowing to the lending country on account of interest or dividends, and eventually in the repayment of principal. The longer a country has had a persistent net outflow of capital funds, the greater are the sums it must receive annually, and the more difficult will it be for the country to keep on lending enough to make the net flow of payments on the capital account move outward. Eventually the time comes when, from the standpoint of the lending country, the inward payments on account of existing indebtedness, added to the payments representing new investments of foreigners in the lending country, will exceed the exports of capital being made by the lending country, and the net balance of payments on account of long-term indebtedness will be inward and not outward.

When this happens we may expect the same sequence of events as has already been described, except that the country which is being repaid will be in the position formerly occupied by the borrowing country. The need to transfer net payments to the former lending country operates to increase both the demand for foreign exchange in the repaying country and the supply of exchange on the repaying country in the one that is being repaid. The rate of exchange on the creditor country rises, while that on the debtor falls. Eventually, after the banks in each country have gone as far as appears wise in facilitating the transfer of funds, a flow of gold to the former lending country may be expected. Despite all steps that can be taken by the central banking system of the creditor country, some expansion of its purchasing power—that is, an expansion of its money and deposit currency as compared with that of the debtor country—may be expected. This relative change in purchasing power will, as before, influence imports and exports, tending, directly or indirectly, to increase imports to the former lending country and to increase exports from the debtor country, regardless of whether or not the price level rises in the creditor country and falls in the debtor country.

In ending this description, we may refer once more to the qualifications of this broad statement of theory which it might be desirable to present were this discussion more extended. Our conclusion is, nevertheless, that a country that is receiving a persistent net inflow of payments on account of long-term indebtedness will have an “unfavorable” balance of trade—that is, an excess of imports—and that repaying countries will tend to be affected in the opposite manner. This changed relationship of imports

to exports in the country that is being repaid may come about through a growth in imports while exports remain constant, through a decline in exports while imports remain constant, or through changes in both; and the same analysis applies to the repaying country. It does not follow that the country that is being repaid will necessarily have an increase in imports from or a decrease in exports to the country that is repaying, or that the latter must have an increase in exports to or a decrease in imports from the country that is being repaid. These things may happen, or they may not. But we know that the country which is receiving net payments *must* have an import balance of trade from whatever source derived, and that the reverse is true for the repaying country.

THE UNITED STATES AS A CREDITOR NATION

The First World War Period. Up to the year 1916 the United States was a debtor nation. At the beginning of World War I, we, as public and private debtors, owed individuals of other countries approximately $5\frac{1}{2}$ billion dollars, while foreign individuals and governments owed individuals in the United States about $2\frac{1}{2}$ billion dollars.¹ Between 1914 and the end of 1919, the United States made huge loans, both public and private, to many countries, and as a result found herself an international creditor to the extent of about 18 billion dollars. This sum, however, represented the nominal value of foreign obligations to this country rather than the actual value, which was probably about 14 billion dollars in view of the adjustments finally made in the war debt obligations of the Allied governments to this country. In addition, allowance should be made for our obligations to other countries, amounting roughly to 4 billion dollars; so that the net actual indebtedness of individuals and governments throughout the rest of the world to individuals in, and the government of, the United States at the close of 1919 was almost 10 billion dollars.²

The 1919-30 Period. The growth of the United States as an international creditor did not end in 1919. While our government ceased to lend to other governments a few years after the close of the war, the private investments of our people in foreign securities and properties continued at a merry pace until, by the end of 1930, it was estimated that the total indebtedness of foreign governments and individuals to the United States government and individuals in this country amounted to roughly 22 billion dollars.³ This figure, however, did not include our investments

¹ R. A. Young, *The International Financial Position of the United States*, New York, National Industrial Conference Board, Inc., 1929, p. 3.

² *Ibid.*, pp. 48, 49.

³ United States Department of Commerce, Bureau of Foreign and Domestic Commerce, *A New Estimate of American Investments Abroad*, Washington, Government Printing Office, 1931, pp. 1, 2.

in Alaska, Hawaii, and Puerto Rico, or in missionary and educational institutions abroad, or any *short-term* obligations due individuals in this country. If we deduct from this estimate some 4 billion dollars, which was approximately our indebtedness to foreign countries in all but short-term obligations, there remained a net indebtedness to the United States of about 18 billion dollars.

The War Debts. The fact that the United States was so great an international creditor in 1930 caused considerable concern, especially in view of the traditional high tariff policy of this country. One of the most disturbing elements in the situation was the matter of the war debts. After the United States entered World War I in April, 1917, loans to the Allied countries consisted largely of direct advances from our government to their governments, as authorized by the various Liberty Loan Acts. It was these direct intergovernmental loans that resulted in the war debts. In making these loans, funds held by individuals and organizations in this country were turned over to the United States government through the purchase of Liberty Bonds. This government then placed the funds, or credits, at the disposal of the Allied powers as needed for the purchase of materials and supplies, the stabilization of foreign exchange rates, and for other purposes.

The war loans, which resulted in the war debts, differed from ordinary international loans in at least two important respects. As we have already noted, these loans were made by our government directly to the governments of the countries with which we were allied, whereas foreign loans are ordinarily made by individuals or companies in one country to individuals or companies in other countries. Hence, the war debts constituted a political as well as an economic problem in all the countries involved. In the second place, the proceeds of the war loans were used for purposes of destruction, so that their expenditure did not provide the means of repayment by adding to the productive capacity of the borrowers. Ordinary loans, of course, are made primarily for productive purposes.

The Funding Agreements and War Debt Statistics. Several years elapsed after World War I before arrangements were made for repaying the war loans. The first "funding" agreement, or arrangement for payment by installments over a long period of years, was concluded with Great Britain in 1923. Other funding agreements followed, until by 1927 the largest debtors of the United States had made arrangements to settle war debts. The total nominal funded indebtedness of our debtors on account of war loans proper, purchases of surplus war supplies, purchases from the United States Grain Corporation, and relief credits, was 11,468 million dollars in November, 1928. To clear up this indebtedness, the debtor nations were obligated to pay some 20,938 million dollars, on account of principal and interest, between 1929 and the end of the debt-paying period, about 1987. The value of these scheduled payments, as of 1929,

was 7870 million dollars, with the future payments discounted at 4 per cent, or 6538 million dollars at the rate of 5 per cent.⁴

Prospects for War Debt Payments. Even after the war debts were safely funded and future payments arranged, there was considerable doubt that these debts would ever be paid. Several factors led to this doubt. First was the question whether the debtor nations were economically able to make the required payments, and whether those in power in these nations would find it politically safe to undertake the payments. Second was the question whether the debtor nations were under moral obligation to pay. The debts had been contracted after our entrance into the war—after the war had become our cause as much as that of the debtor countries. Many of these nations thought that our advances to them should have been regarded not as loans to countries pursuing an objective in which we took no interest, but as expenditures for the security and defense of the United States quite as much as for that of any of the Allied countries—in other words, that they were contributions, according to our ability, to a common cause.

In the third place, the willingness of some countries to make the war debt payments was affected by the discrimination we had practiced in making the war debt settlements, for we treated some of our debtors much better than others. Fourth, it was apparent that the governments of the debtor countries could not, as a matter of political expediency, tax their citizens in order to make war debt payments to the United States unless they continued to receive their reparations payments. By "reparations" we mean those payments which Germany was obligated to make her opponents in World War I for loss and damage to which the Allied and associated governments and their citizens had been subjected by Germany. There was grave doubt that Germany could make the payments which had been imposed on her, but little question that our debtors would refuse to pay us if they did not receive their reparations.

Finally came the important question whether the United States could receive the war debt payments. Some people insisted that there would be little difficulty in this connection, because of the relatively small size of the annual payments. While 256 million dollars per year, the annual average payment due from 1930 to 1934, is a large absolute amount, it is only a fraction of one per cent of the annual income of this country in good years and bad, and less than 6 per cent of our imports in 1929. But the war debt payments could not be considered by themselves, for we would have had to receive these payments in addition to all other payments which had to pass from other countries to this country year by year. In 1930, our private foreign investments amounted to about 15 billion dollars. A yield of 5 per cent on these investments would have required the acceptance of about 750 million dollars a year by this

⁴ R. A. Young, *The International Financial Position of the United States*, pp. 192, 193.

country, if investors were to receive interest payments and dividends.

These incoming payments would have been offset to some extent by outgoing payments on account of the investments of foreign countries in the United States. However, the total payments to be received from abroad each year would have amounted to a large figure. These incoming payments count as exports in our balance sheet of international payments. That is, they bring about a situation like that which results from a heavy exportation of a commodity (say wheat), which would also require foreigners to make payments to this country. Therefore, if we were to receive these payments on account of foreign indebtedness, our total imports of commodities and services would have had to exceed our other export items (which required payments to us) by the amount of the war debt payment and investment payments to us. It would have been necessary, in other words, for us to have received a heavy surplus of imports, apart from the war debt payments.

Under other conditions it might have been possible for us to achieve this necessary import balance of trade, but in 1930 our high protective tariff made it practically impossible to accept the necessary imports. Moreover, generally high tariffs and other obstacles to trade throughout the world made it difficult at that time for the debtor countries to export enough to set up the necessary balances abroad, against which bills of exchange could be drawn to make payments to us. It appears, therefore, that our policy with respect to international trade was inconsistent with our position as an outstanding creditor nation, and threatened to destroy the value of our public and private loans and investments abroad. But, it may be asked, could not the United States have achieved the import balance of trade essential to the payment of foreign debts without lowering the tariff and increasing the importation of dutiable articles? It is true, of course, that an import balance of trade might have been obtained by reducing exports, as well as by increasing imports, but it is difficult to believe that this alternative would have been popular with the rank and file of American business men. If it had been possible to increase greatly our net imports of services, this country might have received large net payments on account of long-term indebtedness without much change in commodity imports. However, it did not appear that any great or sudden expansion in these service items could be looked for at that time. Certain "invisible items," such as tourists' expenditures, might have been expected to increase as time went on. Other items, such as the remittances of immigrants and payments for freight services, were more likely to decrease, the first because of our immigration policy, and the second because of agitation for the development of an American merchant marine. All in all, no great amount of relief could have been expected from this quarter.

Payments to the United States Before 1930. But, it may be asked, were not war debt and reparations payments made and received in the

years before 1930, and did not the United States in those years also receive large payments from abroad on her private loans and investments? The answer is really negative in both cases. Between 1924 and 1930, Germany paid reparations to the amount of 10,300 million Reichsmarks. In order to do this, we might assume on general principles that she had an export surplus of about the same amount, and thus acquired the necessary foreign balances against which the reparations payments were drawn. Actually Germany had in this period an *import* trade balance amounting to 6300 million Reichsmarks. The large reparations payments were possible in the face of this import trade balance only because, in the same period, Germany had borrowed 18,000 million Reichsmarks.⁵ These loans came, to a considerable extent, from the United States. Thus through borrowing abroad, Germany acquired the foreign balances with which to make reparations payments to the Allies. When these balances came to the Allied nations, they were able to make war debt payments to the United States, despite their inability to export to us, and our inability or unwillingness to import from them to any great extent. The reparations and war debt payments in these years amounted fundamentally to our taking large quantities of funds from one pocket and returning smaller quantities to another pocket.

To determine whether the United States actually received large annual payments on account of private loans and investments abroad, in the years before 1930, it is necessary to consider all of the several items that result in payments into or out of this country, on account of long-term indebtedness. Among the outgoing items there are payments on account of imports of securities (both new issues and those outstanding), investments of Americans in foreign properties, government advances to foreign governments, and redemption and sinking fund payments and interest and dividends on our securities held abroad. Among the incoming payments are included those on account of outstanding securities exported, investments of foreigners in properties in the United States, the principal of our government advances and credits returned, interest and dividends on our private investments, interest on our government advances, and the redemption and sinking fund requirements of foreign securities held by us.

When the incoming annual payments are compared with the outgoing payments on the long-term capital account from 1919 to 1930, a fairly good balance of the two movements of funds is observed. For a few years after 1919, there was a net outflow of payments from the United States, but somewhat later there developed a tendency for incoming payments to be slightly in excess of outgoing payments. On the whole, then, there was no real net inflow of payments on our foreign loans and investments

⁵ *The Economist*, London, England, Supplement on the War Debts, November 12, 1932.

in this period. Instead, we maintained and increased the net indebtedness of other nations to us by, in effect, *reinvesting* the amounts due us on account of interest, dividends, and the repayment of principal. Individuals in the United States, of course, received such payments when due, but we as a people refused them, or at least canceled their effects, by making every year a net balance of new foreign investments and loans of substantially the same amount as we received on account of old loans and investments. All in all, the creditor position of the United States did not appear very secure as of 1930.

The Elimination of the War Debts. In the decade after 1930, the creditor position of the United States virtually disappeared. The first step in the process was the complete loss of the value formerly attributed to the war debts—7 billion dollars as of 1930. When the depression of 1929 came and Germany's foreign sources of credit dried up almost overnight, she was in a serious position, for her heavy borrowings obligated her to make large annual payments on her private foreign debts, in addition to her reparations payments. Confronted by the depression and by high tariffs and other obstacles to trade which other countries were maintaining, Germany could not expand her exports sufficiently to acquire foreign balances for purposes of debt payment; nor could she provide the necessary export balance of trade by reducing her imports.

By 1931, it appeared likely that Germany, if left to her own devices, would have to default on her private debt payments to other countries, and on reparations payments as well. This would have meant loss to many private investors in the United States, and the non-payment of war debts by our former Allies because of Germany's failure to pay reparations. Acting on the principle that half a loaf is better than no bread, President Hoover proposed that, for one year dating from June, 1931, all war debt and reparations payments should be suspended. The other nations concerned eventually agreed to this proposal. In this way, a default on private debt payments due American citizens was temporarily avoided.

In the summer of 1932, the Lausanne Agreement gave Germany permanent relief from her reparations obligations, although this abandonment of reparations was presumably contingent upon a like action by the United States with respect to the war debts. Actually it meant the end of reparations, despite the fact that this country took no official action on the war debts. Nevertheless, Germany eventually defaulted on her private debt payments to other countries, by a series of steps taken in 1933 and 1934. After the abandonment of reparations, the countries which owed us war debts, with the single exception of Finland, persistently refused to meet these obligations and there is no longer any hope that these debts will ever be paid.

Decline in the Value of Our Private Investments Abroad. The private investments of American individuals and firms in foreign countries, which

were estimated at 15 to 15½ billion dollars in 1930, amounted to some 13 billion dollars at the beginning of 1935.^a But this latter figure does not show the true extent of the decline which had taken place in the value of our private investments abroad. These investments are divided into direct investments and portfolio (or security) investments. Direct investments are those which involve direct participation in commercial and industrial enterprises abroad, such as investments in American-controlled manufacturing and distributing organizations, mining properties, petroleum lands, plantations, and other properties. The portfolio investments include all our holdings of foreign securities, either publicly offered in this country or secured through purchase in the international market. The direct investments of almost 8 billion dollars at the beginning of 1935 represented the book value of these investments as reported by their owners at the end of 1929 with allowances for additions and deductions since that time, and the figure of over 5 billion dollars for portfolio investments represented the par value of the securities.

While the estimate of direct investments allowed for changes in the quantity of these investments, it apparently did not allow for changes in their value, which must have declined appreciably by 1935 as a result of the depression. However, when the depreciated foreign values of these properties were converted into depreciated United States dollars, it is quite possible that the estimate given for these investments was about right. But this conclusion can scarcely apply to the portfolio investments. Since most of these securities were already expressed in terms of dollars, they could not benefit by conversion into devalued dollars; and the actual value of the securities was probably much less than their par value by 1935, because of total or partial defaults by the debtors on many of the securities.

The creditor position of the United States deteriorated rapidly after 1935 as the result of a large flow of capital funds to this country. This movement had its origin in a number of economic and political factors in the United States and elsewhere. In 1936 and 1937, improved business conditions in the United States led citizens of foreign countries to invest in American stocks and bonds. Disturbed economic and political conditions in France after 1935 resulted in a flight of capital funds from that country, and a large part of these funds came to the United States. The devaluation of the belga in 1935 and of the franc in 1936, together with other difficulties of the gold-bloc countries, was accompanied by a movement of short-term funds to the United States. Other large quantities of short-term funds moved here as a result of the European political and war crises of 1938 and 1939.

The statistics of the period from January, 1935, to September, 1939, indicate that American banks and brokers reduced their funds held in

^a *Barron's Financial Weekly*, September 16, 1935, pp. 5, 6.

foreign countries from \$1,234,000,000 to \$532,000,000. On the other hand, the funds held by American banks and brokers for foreign customers increased from \$679,000,000 to \$3,195,000,000. Foreign holdings of stocks and bonds of the United States increased from \$2,089,000,000 to \$3,200,000,000, while American holdings of foreign dollar bonds were reduced from \$5,296,000,000 to \$3,950,000,000. Since it required a flow of only \$677,000,000 to the United States to reduce our holdings of foreign bonds by \$1,346,000,000, it is clear that these securities were disposed of at prices which averaged about 50 per cent of par. In September, 1939, foreign-owned direct investments in the United States amounted to \$2,435,000,000, and direct American investments in foreign lands totaled \$7,100,000,000.

The net creditor balance of the United States was changed by these developments so that, by September, 1939, it amounted to only \$2,752,000,000. At that time, the long-term investments of the United States in foreign countries amounted to \$11,050,000,000, while our short-term investments abroad totaled \$532,000,000. On the other side of the ledger, foreign long-term investments in the United States were \$5,635,000,000, and short-term foreign investments here were \$3,195,000,000.⁷ The movement of capital funds into the United States continued throughout the remainder of 1939, and in 1940 there was an additional net movement of some \$2,500,000,000 into this country.⁸ Hence, as of the beginning of 1941, our short- and long-term obligations to other countries just about equaled their short- and long-term obligations to us.

THE PRESENT AND FUTURE POSITION OF THE UNITED STATES

The Present International Financial Position of the United States. World War II, unlike its predecessor, did not result in a great extension of the position of the United States as a creditor nation. As in World War I, our Allies asked for large advances of food, munitions, services, and many other things; and we furnished economic goods worth about 50½ billion dollars, as we noted in the preceding chapter. However, in World War II these deliveries to our Allies were made on the basis of the Act to Promote the Defense of the United States, passed in March, 1941, which (as we have already noted) authorized the President to sell, transfer title to, lease, lend, or otherwise dispose of various defense goods to other countries whose defense was deemed vital to that of the United States. The lend-lease deliveries were not construed by this country as loans, and

⁷ The statistics for the 1935-39 period are from A. Maffry and P. D. Dickens, "The Balance of International Payments of the United States in 1939," reprinted from the *Survey of Current Business*, February, 1940.

⁸ *Survey of Current Business*, February, 1941, p. 55.

did not result in debts of other nations to the United States, for the Act provided that the offsetting benefit to the United States could be payment in kind or property, or any other direct or indirect benefit which the President deemed satisfactory.

With lend-lease deliveries to our Allies and foreign loans by our federal government eliminated from the analysis, the United States became a debtor nation again before the end of World War II. Late in 1944 our total investments abroad amounted to 11.1 billion dollars, while foreign investments in the United States totaled 12.3 billions, leaving us a net debtor by 1.2 billions. Our long-term investments abroad still exceeded long-term foreign investments in the United States by 4.4 billion dollars, but we had only one-half billion dollars' worth of short-term investments abroad, whereas foreign short-term investments in the United States came to 6.1 billion dollars.⁹

Prospects for Increased Foreign Investments. After the end of the war, however, there seemed to be an excellent chance that the United States would soon become a large-scale creditor nation once more. Several factors gave support to this conclusion. For one thing, short-term foreign investments in this country had been made for the most part with funds sent here for safekeeping, and it was considered probable that a large portion of them would be withdrawn after the return of peacetime conditions. Second, the end of the war and the discontinuance of lend-lease deliveries to our Allies found large quantities of American goods in transit, or actually in foreign countries but not yet delivered. Since lend-lease deliveries were no longer possible, these goods were in many cases sold to our Allies on credit. Third, soon after the end of the war the government of Great Britain applied to the government of the United States for a loan of \$3,750,000,000, and it was rather expected that the governments of other countries would make similar applications. Finally, the foundation of the International Bank for Reconstruction and Development seemed to open up a wide field for foreign investments on the part of the United States. The latter two matters warrant further comment.

The Loan to Britain. As agreed upon by the two governments, and ratified by the British Parliament and the Congress of the United States, the loan to Britain involved \$3,750,000,000 of "new" capital. The British obligation to repay, however, amounted to \$4,400,000,000 exclusive of interest, with the extra \$650,000,000 constituting the sole return to the United States for some 25 billion dollars' worth of *net* lend-lease deliveries made to the British Empire during World War II. The loan was to be spent largely in the United States for machinery, raw materials, food, and other commodities and services. Repayment was scheduled to be made

⁹ National Industrial Conference Board, *The Economic Almanac for 1945-46*, New York, 1945, p. 306.

in fifty installments, beginning December 31, 1951, and with interest at 2 per cent from that date on.

Great Britain was said to need the loan because the war had greatly reduced her ability to pay for needed imports. Her export trade had been seriously curtailed, she had been forced to sell part of her foreign investments, and many of her ships had been sunk by enemy action. The loan was expected to tide her over the period necessary for rebuilding her foreign trade, and to restore her ability to perform the services she formerly rendered to other countries. It was argued that, if Great Britain were unable to secure this loan from us, she would be compelled to continue and increase the use of restrictive measures and devices, such as high tariffs, preferential tariff agreements within the empire, the sterling bloc, exclusive bilateral trading arrangements, private international cartels, quotas, export and import licensing, and exchange controls. Such a policy on the part of Great Britain would go far toward defeating international plans for the stimulation of trade and the stabilization of monetary and exchange relationships between countries.

Besides agreeing to repay the loan with interest, Great Britain promised to enter into negotiations for the reduction or elimination of various trade barriers, such as those mentioned in the preceding paragraph, and to participate in an International Conference on Trade and Employment which, it was hoped, would reach an agreement on an international code covering trade barriers, restrictions, and discriminations, and would blueprint an International Trade Organization that would work in close relation with the Economic and Social Council of the United Nations. More specifically, Great Britain agreed that, if the loan were made, she would not restrict payments to the United States for export or other current transactions, she would end most exchange controls within a year, and she would discontinue the use of import quotas in a way that would discriminate against American traders, save under specified exceptional circumstances, by the end of 1946 or earlier.

The loan to Britain was not altogether popular in the United States, despite a strenuous propaganda effort in its behalf by our government. The benefits of the loan to Great Britain were deemed immediate and substantial, while the resultant gains to the United States were considered to be vague, indefinite, and deferred, though potentially important. Though the terms of the loan were considered harsh by many British citizens, they appeared excessively mild to some people in the United States. There was some doubt that the loan was a sound credit transaction, or that it would have been seriously considered by any agency except our federal government. The payments of principal and interest were spread over such a long period of time and were hedged about with so many restrictions and qualifications that many people doubted that they would ever be made. Hence, it was held, the loan should be considered

and evaluated as an outright gift. In view of our past experience, it was perhaps understandable that some of our citizens should be a bit cynical about a loan made by the federal government to the government of another country.

The International Bank for Reconstruction and Development. The Bretton Woods Agreement, as ratified by forty-five countries by the end of 1947, provided for the International Bank for Reconstruction and Development as well as for the International Monetary Fund. The Bank has an authorized capital of 10 billion dollars, and by the end of 1947 over 8 billion dollars had been subscribed by the countries which had accepted membership in the Bank. The United States has made the largest contribution (\$3,175,000,000) to this capital, followed by the United Kingdom, China, France, and other member countries. The Bank can call upon member countries to pay in 20 per cent of their subscriptions; the other 80 per cent will be held in reserve by the member countries, to be called for only when it is required for the purpose of covering losses sustained by the Bank.

The Bank is to be controlled and managed by a Board of Governors, Executive Directors, a President, and other necessary officers and staff. Each member country will appoint one Governor to the Board, and the voting power of the individual Governors will be determined in the same way as in the case of the International Monetary Fund. There will be twelve Executive Directors, who will serve two-year terms. Five of these Directors will be chosen by the five countries that make the largest contributions to the capital of the Bank, and the other seven by the other member countries. The President of the Bank is the equivalent of the Managing Director of the International Monetary Fund, and he will have an Advisory Council of seven members chosen by the Board of Governors to represent banking, commercial, industrial, labor, and agricultural interests.

The stated objectives of the Bank are: (1) to assist in the reconstruction and development of the territories of members by facilitating the investment of capital for productive purposes, including the restoration of economies destroyed or disrupted by war, the reconversion of productive facilities to peacetime needs, and the encouragement of the development of productive facilities and resources in the less developed countries; (2) to promote private foreign investment by means of the guaranty of or participation in loans and other investments made by private investors and, when private capital is not available on reasonable terms, to supplement private investment by providing, on suitable conditions, funds out of its own resources; (3) to promote the long-range balanced growth of international trade and the maintenance of equilibrium in balances of payments by encouraging international investment; (4) to arrange the loans made and guaranteed by it in relation to international loans made

through other channels so that the more urgent and useful projects will be dealt with first; and (5) to conduct its operations with due regard for the effects of international investment on business conditions in the territories of member countries and, in the immediate post-war years, to assist in bringing about a smooth transition from a wartime to peacetime economy.

As some of these statements suggest, the Bank may make or facilitate international loans in three ways. First, it may make direct loans out of its own funds, using the 20 per cent of its capital actually paid in by or on immediate call from the member countries. Second, the Bank, with the approval of the member countries in whose financial markets the funds are raised, may borrow funds which can then be converted into other currencies or into gold and used for direct loans. In providing foreign exchange for a borrower, the Bank must give him the particular currencies which he requires. It will not give him dollars unless he needs dollars to spend in the United States. On the other hand, a borrower cannot acquire currencies from the bank for the purpose of selling them in the exchange markets for other currencies.

The Bank determines the interest rate, the amortization payments, the maturity, and the commission to be charged, in connection with direct loans of either type. The charges and the repayment schedule must be reasonable and appropriate to the projects financed. Repayments of principal and payments of interest and commission must be made in currency of the borrowers which has a value equivalent to the dollar value assigned to these payments when the loans were made. Third, international loans may be made by private investors and agencies through the usual investment channels and be guaranteed by the Bank. Loans of this type must meet conditions similar to those prescribed for direct loans. The Bank must receive suitable compensation for its risks in guaranteeing loans. For the first ten years the commission charged on such loans must be between 1 and $1\frac{1}{2}$ per cent, but it may be lowered thereafter. All payments of commission received by the Bank must be kept as a reserve.

If the Bank functions according to schedule, its operation will tend to push the United States to the forefront as a creditor nation. Clearly the Bank could not function extensively in the field of international loans and investments with 20 per cent of its own capital. Equally clearly, no country except the United States will be in a position to do much international lending for years to come. If the Bank is to raise funds in the markets of a member country in order to make direct loans to other countries, the country supplying the funds is almost certain to be the United States. Similarly, the international loans made by private investors and guaranteed by the Bank are almost certain to originate in the United States.

After members of the Board of Governors, the Executive Directors, and the President had been chosen, the Directors decided upon June 25, 1946,

as the date upon which the Bank would formally begin operations. The first annual meeting of the Board of Governors was held in Washington in September, 1946, and a few countries which were not among the original signatories of the Bretton Woods Agreement were admitted to membership. By the end of May, 1947, the Bank had called in all of the callable 20 per cent of members' subscriptions and had made its first loan (of 250 million dollars) to the Credit National, a semi-public corporation in France. This loan, guaranteed by the French government, is of 30 years' duration and bears 3 per cent interest and 1 per cent commission. Other countries were expected to follow France's example.

Future Prospects. It is difficult to evaluate the policy of the United States in apparently committing itself to become once more a creditor nation on a large scale.¹⁰ Certainly there is little in our experience in the field of foreign loans and investments to commend such a policy. Our past mistakes in this field are fairly obvious. We have bought risky, high-interest foreign bonds from issuing governments already overburdened with public and private obligations to other countries. We have bought the bonds of countries which were notorious as graveyards for foreign investments and as defaulters on their obligations. In short, we have loaned to foreign governments when we would never, as private business men, have extended credit to prospective borrowers under similar conditions. We have been willing to purchase the securities of foreign companies with high-sounding names without any knowledge of their financial condition, present business, and future prospects. Undoubtedly, there is a certain glamour about a foreign investment, but glamour scarcely compensates the investor for the loss of principal or interest, or both. Even our direct investments abroad have sometimes indicated poor judgment, if nothing worse.

On the other hand, despite the mistakes of the past, there are legitimate and valuable functions to be performed by foreign loans and investments. They aid in the development of new countries and backward areas. Thus they facilitate the extension of international specialization, or division of labor, and make for an increase in world production, markets, and trade. Foreign investments also contribute to the maintenance of a sound international financial system based on the gold standard or some other mechanism such as the International Monetary Fund. They help to smooth out temporary disequilibriums of imports and exports, to distribute the world's gold supply among the nations, and to stabilize foreign exchange rates. They are, or might well be, a tie binding the nations of the world together. Finally, they will be badly needed in the post-war period to help

¹⁰ By the middle of 1947, post-war foreign loans of the United States already amounted to about 13 billion dollars, and President Truman in December, 1947, recommended further foreign grants and loans, under the Marshall Plan, amounting to 17 billion dollars.

devastated and war-torn countries to rebuild and get on their feet once more.

The successful functioning of the various international organizations which have been set up recently would go far toward making foreign loans and investments both safe and profitable for the United States. It would be most unwise and unsafe for us to make large new loans and investments abroad while maintaining our old high tariff policy. If we did this, the new loans and investments would for a time make it possible for this country to export heavily while importing lightly. Eventually, however, the annual payments to be received on account of old loans and investments would exceed, by a large sum, our new annual loans and investments, and the safety of our creditor position would be gravely endangered under the high tariff policy. We should not become a great international creditor unless we are willing to accept the responsibilities of a mature creditor nation. Fortunately, however, the International Monetary Fund, the Economic and Social Council of the United Nations, and the proposed International Trade Organization are all expected to work for the lowering or elimination of tariffs and other obstacles to international trade; and the United States, in common with other nations, will have to trade more freely than formerly in order to live up to her responsibilities in connection with these organizations.

Again, large foreign loans and investments would be unwise and unsafe if international monetary relationships and foreign exchange rates remain as unstable in the future as they were during the 1930's. Foreign investments should not be made unless our prospective investors can know, with a fair degree of certainty, at what rate the earnings of foreign properties can be converted into dollars, and what the dollars will be worth when they get them; and until they are assured, further, that some foreign dictator will not destroy the value of their investments by taking over the direct control of properties or forbidding the payment of interest on foreign-owned bonds. Moreover, if we felt that international economic conditions made it imperative for the United States to continue to use a managed currency, so that the dollar had no fixed value in terms of foreign currencies though it might have a fairly stable purchasing power at home, the prospects of our making large new foreign loans and investments would be anything but bright. Here again, however, we should recall that it is one of the major objectives of the International Monetary Fund to stabilize monetary systems and foreign exchange rates and to eliminate managed monetary systems, currency depreciation, foreign exchange controls, and other devices which contributed to the unsatisfactory conditions of the 1930's.

Finally, large foreign loans and investments on the part of the United States would be unwise and unsafe on the basis of our former foreign investment judgment and standards. Our investors have needed to learn

that a poor investment is not sound merely because it is made outside the United States. And they have needed to understand that foreign investment is always risky and that, in appraising prospective foreign investments, they should apply standards which are even more severe and rigid than those applied to domestic investments. The new international organizations may help in this connection also. The International Bank for Reconstruction and Development is intended to operate conservatively. The Bank and the Fund will have adequate information on the member countries in connection with such things as holdings of gold and foreign exchange, gold production, imports and exports, prices, and production. On the basis of such information, it should be possible to estimate a country's credit needs and evaluate its status as a credit risk more accurately than in the past. We should be able to avoid the overlending to particular countries in which we have indulged on former occasions. And private investors and banks in this country, in turning funds over to the International Bank for the making of direct loans or in purchasing securities guaranteed by the Bank, may be much safer than they were in the past when they had to rely largely on their own judgment and information in making foreign loans and investments.

Thus, the success of the United States as a creditor nation in the post-war period seems to depend on the functioning of the international organizations to which this country has become a party. If these organizations operate well, the United States may have a long and profitable career in the field of foreign loans and investments. If not, the outlook is anything but promising. Some people fear that the International Bank itself may operate to the disadvantage of the United States. Since the United States will be the only important lending country for some time to come and since the other member countries will have a great majority of the voting power, it is said that we shall have here a bank controlled by its borrowers—which, it is claimed, is like having an insane asylum controlled by its inmates. That is to say, it is feared that the Bank, as controlled by the borrower nations, may use our funds to make unsound loans on inadequate security. If this fear actually becomes a reality, we should find ourselves once more a sadder but wiser ex-creditor nation after a few years.

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1. What is meant by an "export of capital"?
 2. How does a persistent net outflow of capital affect the foreign exchange market? How does it affect international trade?
 3. What are the economic effects of a persistent net inflow of payments on the long-term capital account?
 4. In what respect did the international financial position of the United States change between 1914 and 1919? Between 1919 and 1930? Explain.
 5. How were World War I debts created?

6. "The war debts to the United States differed from other international debts in some respects." Do you agree? If so, why?
7. Describe the war debt funding agreements.
8. Did it seem likely, as of 1930, that the war debts would be paid? Explain.
9. Could the United States have received the war debt payments under a continuation of her traditional tariff policy? Explain.
10. Show how the necessity of receiving large annual payments on account of private loans and investments abroad complicated the problem of receiving the war debt payments for the United States.
11. "The fact that war debt and reparations payments were made and received, prior to 1930, indicates that they could have been made and received after that date." Do you agree? Explain.
12. Explain carefully the significance of the private foreign loans and investments made by the United States between 1919 and 1930.
13. What happened to the war debts after 1930, and why?
14. "In the decade after 1930, the creditor position of the United States virtually disappeared." Explain.
15. Distinguish between "direct" and "portfolio" investments.
16. Why did the actual value of the private foreign loans and investments of the United States decline after 1930?
17. Show how certain developments between 1935 and 1940 affected the creditor position of the United States.
18. Why was there no extension of the creditor position of the United States during World War II?
19. "After the end of World War II, there seemed to be an excellent chance that the United States would soon become a large-scale creditor nation once more." Explain.
20. Indicate the terms and significance of the loan from the United States government to Great Britain.
21. What are the objectives of the International Bank for Reconstruction and Development?
22. How is the International Bank supposed to operate? Explain.
23. "The International Bank may make or facilitate three types of international loans." Explain.
24. Why will the operation of the International Bank tend to push the United States to the forefront as a creditor nation?
25. What grave mistakes have we made in the past in the field of foreign investments?
26. What are the functions of foreign investments? Explain.
27. "The successful functioning of the various international organizations which have been set up recently would go far toward making foreign loans and investments both safe and profitable for the United States." Explain.
28. What should be the post-war policy of the United States with regard to foreign loans and investments? Explain.

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The Economic Interdependence of Nations

MANY PUZZLING ECONOMIC PROBLEMS HAVE ARISEN FROM THE FACT THAT population tends to expand while the amount of land—this term including all natural resources—is fixed. Well over a hundred years ago, when Thomas Robert Malthus was formulating his statement of the tendency of population to outrun the means of subsistence, it appeared that the population of Great Britain and other countries had nearly reached the maximum which could be supported. The present population of Great Britain, however, is about four times that which had appeared so large at the beginning of the nineteenth century, and the population of the world as a whole has more than doubled in the same period of time.

INDUSTRIALIZATION AND ECONOMIC INTERDEPENDENCE

In fact, at the very time that Malthus was writing, a movement was under way which was to go far toward affording a solution for the difficulties which he saw and feared, although the solution brought with it new problems, among which is that discussed in the present chapter. The movement referred to was the speedy growth of industrialization, and its early events were so spectacular that it has long been called the Industrial Revolution.

The Case of Great Britain. It is a well-known fact that a country of given size and resources can support a much larger population through industrialization than through agriculture. Great Britain, for example, had great difficulty in providing food for her relatively small population a century or more ago. In recent years, however, she has been able to support many more people on a considerably higher standard of living. This has been accomplished by getting from other parts of the world one-half to two-thirds of her foodstuffs, as well as large quantities of other basic materials, such as petroleum, copper, lead, wool, cotton, sulphur, aluminum, zinc, rubber, manganese, nickel, chromite, tungsten, potash,

phosphates, antimony, tin, mercury, and mica.¹ The chief economic activity of Great Britain, apart from the mining of coal, has been manufacturing. The manufacturing industries have provided enough goods to supply the domestic market and still leave a large surplus to be exported in payment for heavy imports of raw materials and foods.

German Industrialization and Dependence. The industrialization of Germany has developed since the formation of the German Empire in 1871. Since that time, Germany has experienced a growth of more than 50 per cent in population,² the concentration of large masses of the people in urban districts, the development of a wide variety of manufacturing industries, a tremendous expansion in foreign trade, and the formation of many large business combinations, or cartels. These changes made it possible for the increased population of the country to enjoy a higher standard of living than prevailed in former years, but this progress was obtained at a cost. That is, Germany in pre-fascist days was dependent upon other countries for a fifth or more of her food, including as much as half her total consumption of fats, and for large quantities of industrial materials as well. She had abundant domestic supplies of coal, nitrates, and potash, and less adequate supplies of iron ore, lead, and zinc, but had to import all or almost all her petroleum, copper, sulphur, aluminum, cotton, wool, rubber, manganese, nickel, chromite, tungsten, phosphates, antimony, tin, mercury, and mica.³

The Position of the United States. Economic self-sufficiency on a natural basis is probably as nearly realized in the United States as in any other country, except possibly Soviet Russia, but even this country is dependent upon others for a wide variety of essential products. As the industrialization of the United States has become more complete, the trend in our imports has been more and more toward raw materials and foods and away from manufactured products, while the latter have become an increasing part of our exports, replacing raw and semi-finished goods. The United States can ordinarily produce all the coal, iron ore, petroleum, copper, lead, sulphur, cotton, zinc, phosphates, and mica she needs; is less well supplied with nitrates, aluminum, wool, and mercury; and must import rubber, manganese, nickel, chromite, tungsten, potash, antimony, tin, and other essential raw materials.³ We are at least partly dependent upon other countries for tea, spices, coffee, tobacco, wood pulp, hides, silk, jute, hemp, sisal, quinine, and iodine.

The Problem of Economic Interdependence. As we have seen, it has been decided in many countries that the economic welfare of their large

¹ P. T. Ellsworth, *International Economics*, New York, The Macmillan Company, 1938, p. 504.

² Statements in this introductory section, relating to population and resources, describe the situation which prevailed prior to Germany's attempt to establish a "New Order" in Europe.

³ P. T. Ellsworth, *International Economics*, p. 504.

and growing populations could best be cared for by placing their chief economic reliance on manufacturing. This has made it necessary for these countries to look to other lands for large quantities of foodstuffs and raw materials for manufacturing, both because no country is suited for producing all essential materials for itself, and because in many of them the soil cannot be made to furnish sufficient food to provide for the needs of the very dense populations. At the same time, markets for large quantities of manufactured products must be found in other countries, so that payments for the incoming foodstuffs and raw materials can be made.

Large-scale production has become the rule in the industrial countries and has made possible the realization of many economies. On the other hand, however, it has required large investments of capital and has brought heavy fixed costs, which make it imperative that the industries be operated continuously and as close to full capacity as possible. This, in turn, has made it necessary that the flow of raw materials be ample and constant, and that markets be ever available in which the products of industry can be sold. The dependence of the nations of the world upon each other for raw materials and markets, and their struggles to obtain and to retain control over these materials and markets, constitute the problem of the economic interdependence of nations.

THE QUEST FOR COLONIES AND CONCESSIONS

With several nations undergoing a process of rapid industrialization at one time and realizing more and more keenly the need for foreign markets and importations of raw materials and foods, it is not surprising that these countries cast many a covetous eye at the more backward areas of the world which seemed capable of furnishing markets and materials, and possible homes for surplus populations. However, the needs of the industrial countries were so urgent that these nations declined to leave the development of backward areas to chance or to a competitive struggle between the rivals. Instead, each country sought to reserve areas for its exclusive colonial development. This does not mean that all colonies have been established because the mother countries needed foods, materials, markets, and relief from population pressure, for many other motives—sentimental, religious, and political—have led to colonization. It may safely be said, however, that these economic needs were a major factor in the struggle for colonies which marked the last few decades before World War I.

Results of the Search for Colonies. As so often happens in economic and other contests, the most advantageous positions in the colonial field were taken by the early comers. The process of industrialization began first and developed most rapidly in England, and it forced an early recognition of the need for outside sources of food and raw materials, as well

as for outlets for surplus population and manufactured products. The securing of colonies was considered to be the simplest means of satisfying these wants, and through colonization the British Empire was made to grow by leaps and bounds. It was for many years, if considered as an economic unit, the most nearly self-sufficient political entity in the world. However, for certain purposes, the empire cannot be considered as a unit.

France also got an early start in the race for colonies, but she finished well behind the leader, England, in the quality and quantity of colonies that she finally controlled. Germany and Italy, who started late in the race for colonies, did not secure many rich colonial prizes. Both of these countries obtained colonies, largely in Africa, but they were for the most part areas which were not particularly desirable. Germany, of course, was stripped of her colonies following World War I.

The Economic Development of Colonies. The degree of control exercised over the economic development of the colonies has varied greatly among the mother countries. Some colonies have been left free to develop in their own way, while almost every phase of the economic life of others has been dictated by the nations in control. Quite often the mother country has definitely encouraged the production of essential foodstuffs and materials, or has discouraged the growth of industries which would compete with those already established at home. In any case, colonies have usually been furnished with capital for development through loans or direct investments, and have been aided in building transportation systems and securing credit facilities. The foreign trade of colonies is often controlled in the interests of the mother countries, which sometimes spend large sums to induce their citizens to emigrate to the colonies. Such inducements may include direct economic incentives to the emigrating people, free maintenance of law and order, and improvements designed to make life in the colonies attractive to prospective colonists.

Preferential Tariffs. The methods by which nations attempt to reap the greatest possible economic benefits from their colonial possessions vary from case to case. One common method is the use of a preferential tariff system. Under such a system, lower duties are applied by the colony to products coming from the mother country than to identical products coming from other sources. Similar discriminations are made by the mother country in favor of the colony. Thus, the industries of the mother country are given the privilege of marketing their goods in the colony upon more favorable terms than those granted to producers in other countries. Whether or not this is a great advantage will depend, however, upon the size of the preferential duties, which may still be sufficiently high to give protection to colonial industries.

While important raw materials are allowed considerable freedom of entrance by most industrial nations, it is often possible for a colony to derive much benefit from preferential duties applied to its products by

the mother country. If, for example, the mother country is applying protective duties to certain foodstuffs and raw materials in order to stimulate domestic production, or if it levies high duties on certain foodstuffs for revenue purposes, preferential duties may be a distinct advantage for a colony. Preferential tariffs exist, or have existed, between Spain and her colonies, Portugal and her colonies, France and some of her colonies, and within the British Empire.

Preferential duties, however, are not always on imports. Preferential export duties are often applied to raw materials, and are a menace to amicable trade relations between nations. The purpose of such duties may be in part to encourage shipping and trade, but it is primarily to stimulate industry in the mother country by furnishing it with raw materials on favorable terms. A preferential export duty is simple in application. A certain amount is collected for each unit of the raw material exported, and a part or the whole of this amount is given back if the destination of the export is the mother country, or if it can be shown that the next process in the utilization of the material will be or has been performed in the mother country or another colony.

One example of a preferential export duty was that of India on untanned hides and skins. In 1919 an export duty of 15 per cent was applied to these articles, and a rebate of two-thirds of this amount was allowed on exports to be tanned within the British Empire. This preferential duty affected American tanners adversely, aroused much resentment, and caused considerable trade to be diverted to other markets. The duty was changed in 1923 so that it affected all countries equally.

As has been said, preferential tariffs are often ineffective because even the preferential rates are so high that little advantage is given to the country that is nominally favored. To the extent that a real benefit is conferred, ill feeling and retaliation by other countries are likely to result. The President of the United States, for example, has had the power to impose additional duties on or even to exclude products coming from any country which discriminates against our commerce.

Assimilated Tariffs. When the tariff policy of the mother country toward the colonies is that of assimilation, discrimination against other countries is complete, for under this policy the colonies are made a part of the mother country for tariff purposes. This means that colonial raw materials, which are subject to an export tax when shipped to other countries, pass to the mother country without interference. At the same time, both colonies and mother country may send goods to each other without fear of import duties, whereas goods from other countries attempting to enter either mother country or colonies run up against the tariff wall of the mother country, within which the colonies are included. The policy of assimilation has been applied by the United States to Puerto Rico, Hawaii, and Alaska, and by France to many of her colonies.

Protectorates. When industrial nations have deemed it impossible or unwise to secure complete control over a backward area through colonization, they have been able at times to accomplish some of their ends through the development of protectorates. A protectorate exists when one state, usually by treaty, gives to another and stronger state a considerable degree of control over its foreign relations, or possibly the right to intervene in its domestic affairs under certain conditions, in return for a guaranty of protection.⁴ Protectorates have often been set up when an industrial nation has hesitated to take the military action necessary to bring a backward area under complete control or when an attempt at annexation might have aroused the opposition of other industrial powers. Protectorates have, in general, furnished a rather unstable type of control over backward areas, for they have usually become outright colonies in due time or have achieved their independence.

However, they have, in their time, given the protecting nations certain important advantages. The protected countries have often agreed not to conclude any treaties with other countries, obtain any loans from other countries, or make concessions to the citizens of other countries without the consent of the protecting countries. The latter are often allowed to maintain troops in the protected areas, appoint governor-generals, and safeguard the personal and property rights of the citizens of the protected country who are located in other lands.

Mandates. Some control over the development of backward areas has been enjoyed by certain nations under the so-called mandate system. This system developed after World War I under the auspices of the League of Nations. Under a mandate, an advanced state held a backward area in trust for the League of Nations, helping to administer its affairs until it was able to stand by itself. The mandatory state was expected to administer the controlled area for the benefit of the people of that area and not for its own advantage, and to maintain the "open door" policy with respect to other nations. That is, other nations were to be allowed to do business in the mandated territory, to make investments there, and to receive concessions for the development of resources. However, some advantages of an economic character were almost certain to be enjoyed by the mandatory nations from their control over backward areas.

Concessions. Even in the absence of political control, it has often been possible for industrial nations to achieve a measure of control over backward areas by means of concessions. A concession is a grant of power, usually given by a country in which governmental control is weak and which is undeveloped economically, to individuals or companies of other countries to utilize mineral resources or otherwise develop an area, subject to certain rules and restrictions imposed by the granting country. Conces-

⁴ *Encyclopædia of the Social Sciences*, New York, The Macmillan Company, 1934, vol. xii, pp. 567-571.

sions may be granted for a variety of purposes, but the most important are probably plantation, mineral, and petroleum concessions.

While concessions are not usually made directly between nations, it is nevertheless true that national governments are greatly interested in concessions granted to their nationals. The struggle for the oil reserves of the world has been particularly keen since the importance of petroleum in the operation of naval vessels and airplanes, and in many other uses, has been apparent. Access to adequate oil resources has appeared to be almost a matter of national life or death. A few years ago Great Britain, besides being closely affiliated with the Royal Dutch-Shell oil interests and insisting that the Turkish Petroleum Company's operations should be British-controlled, owned a majority of the shares of the Anglo-Persian Oil Company.⁵ This company had a blanket concession which gave it control over the oil resources in all of Persia except five northern provinces. It also owned in part the Burma Oil Company, which was prominent in the Burma field where the British had a monopoly. Concessions for the development of the oil resources of Mesopotamia have changed hands several times. These resources have been exploited by a British-controlled company, with American and French oil companies participating.

The Netherlands has been directly interested in the Royal Dutch-Shell group, which had a virtual monopoly of petroleum production in the fields of the Dutch East Indies, as well as important concessions in South and Central America. While the government of the United States is not so directly interested in American oil companies as are the governments of Great Britain and the Netherlands in their respective companies, it is nevertheless true that our government has been much concerned over the difficulties experienced by American companies in gaining a foothold in the newer oil fields which hold much of the oil supply of the future. Moreover, during World War II, the United States became actively interested in assisting with the development of the oil resources of some South and Central American countries and other areas.

The development of many of the important mineral resources of the world has taken place under concessions. In China, Mexico, and Latin America, concessions have often been granted for the exploitation of minerals by outsiders. The rich resources of Central Africa, which include copper, gold, diamonds, tin, iron, bauxite, and many other minerals, have also been developed under concessions of enormous size, held chiefly by companies under the control of Belgian and British capitalists.

Modern Imperialism. The international struggle for raw materials, markets, and outlets for surplus population is not confined to the distant past, for we have recently had a number of modern examples of imperi-

⁵C. K. Leith, *World Minerals and World Politics*, New York, McGraw-Hill Book Company, Inc., 1931, pp. 87, 88.

alism. Some countries have been content merely to try to obtain economic control over areas that are economically backward, but others have apparently been ready and willing to conquer, annex, and control politically any areas on which they could lay their hands.

In September, 1931, Japan overran Manchuria and Jehol Province in China, and soon gained control over some 365,000 square miles of territory, much fertile agricultural land, mineral resources, and a population of 30 to 34 million people. Later, the area was set up as a nominally independent state under the title of Manchukuo, but there was no doubt that it had become, in effect, a Japanese province. Again in 1937, and presumably because of an anti-Japanese "incident," Japanese armed forces invaded China and in the next few years conquered large additional sections of the country. According to Japan, her activities in China were purely defensive, but this was clearly an attempt to dress up the wolf of imperialism in sheep's clothing. Finally, in a relatively short time after December 7, 1941, Japan's armed might gave her control over the Philippine Islands, additional areas in China, British Malaya, the Dutch East Indies, French Indo-China, Thailand, and other areas. These adventures brought her, but only temporarily, many millions of square miles of territory, hundreds of millions of people, and many rich sources of vital materials such as rubber, tin, and petroleum.

In October, 1935, Italy undertook to "protect" Italian lives and property from the "barbaric" Ethiopians, and to avenge certain "border outrages" which had allegedly proved humiliating to her national honor. By May, 1936, she had conquered the whole of Ethiopia in "self-defense," and annexed it to Italy. This conquest brought her an area of 350,000 square miles, with a population of 10 millions, and extensive agricultural and mineral resources. A little later, Italy found it necessary, for similar reasons, to conquer neighboring Albania, securing an additional 17,500 square miles of territory and about a million people. These gains, and others acquired later, were stripped from her when she retired most ingloriously from World War II in 1943.

Germany's territorial gains after 1939 were far more impressive than those of Italy. Deprived of her colonies under the Versailles Treaty, and with her vital foreign trade at low ebb, Germany under National Socialism rose in her military might to seize food, raw materials, markets, industrial equipment, and "living room" in general. By actual military conquest or by intimidation, she brought Norway, Denmark, Belgium, the Netherlands, Austria, Czechoslovakia, Hungary, Roumania, Bulgaria, Yugoslavia, Greece, Poland, France, much of Russia, and other areas under her dominion. If Germany could have retained all the regions over which she gained temporary control, her area would have been increased by well over a million square miles, her population by several hundred million people, and her resources by riches that can hardly be estimated. Actually,

of course, these gains and more too were lost in the course of World War II, and Germany was visited with a destruction from which she will be a long time recovering.

THE FRUITS OF IMPERIALISM

In general, it is necessary to conclude that the results of imperialism have been rather unsatisfactory. Nations have gained much by industrialization and by drawing upon other parts of the world for food, raw materials, markets, and relief from population pressure, but they have gained relatively little through their attempts to reach these ends by conquest, annexation, and exclusive control. In support of this conclusion, let us examine in turn the advantages which nations are supposed to derive from their colonies or other controlled areas.

Relief from Population Pressure. In many cases, the colonies acquired by industrial nations have served but poorly as outlets for surplus population. As one writer puts it, Italy exhausted herself for many years before World War I to obtain colonies, but when in 1914 the war broke out there were only 8000 Italians in all of her African colonies—a smaller number than lived within a radius of a quarter of a mile of Cherry Street, New York City, and only 2 per cent of the Italian population of the State of New York.⁶ He suggested that, if Italy had both control over Ethiopia and freedom of immigration to the United States, 500 Italians would come here annually for every one that went to Ethiopia.

Germany's experience was similar, according to this writer. By 1914 she had only 22,000 German colonists in her 900,000 square miles of African colonies, and only 2000 more in all the rest of her colonies. At the time, there were more than 24,000 Germans between 80th and 90th Streets on Manhattan Island, and 25 times as many in New York State. Japan, at a cost of 300,000 men, won South Manchuria from Russia in 1905. Twenty-five years later there were only 200,000 Japanese in this territory, or fewer than were killed in the war, and only one-third of the annual increase in the population of Japan.

There is considerable evidence to show that the inhabitants of advanced countries are much more likely to move to other independent civilized countries than to their own colonies. Many colonies acquired by nations in recent years are almost uninhabitable for the people of these nations, or are already densely populated by natives. Even when conditions in the mother country and colony appear to be fairly similar, it is often difficult to stimulate emigration. Thus, the Japanese declined to emigrate to South Manchuria because of lower standards of living there, because the climate was somewhat more rigorous, and because their favorite food,

⁶ Nathaniel Peffer, "The Fallacy of Conquest," *Harper's Magazine*, January, 1936, pp. 129-136.

rice, could not be grown readily in all parts of the colony—and this despite the expenditure of large sums by the Japanese Oriental Development Company to encourage emigration. Of course, some nations acquired colonies long ago which were more suitable for colonization, but most of the recently acquired colonies have failed to attract large numbers from the mother countries.

We may also note here the fact that the nations which, in the last few years before World War II, talked most and loudest about the pressure of population and the need for room to expand—such as Italy, Japan, and Germany—were not, after all, unusually densely populated. Before entering on their campaigns for expansion, these three countries had a population of 133, 135, and 140 persons, respectively, to the square kilometer, while Holland, England, and Belgium had 232, 264, and 266, respectively.⁷ There were, to be sure, some differences between these countries in their per capita holdings of arable land and natural resources. But it is likewise true that those countries which complained most about population pressure seemed to go out of their way to increase this pressure by attempting to raise the birth rate.

Food and Raw Materials. The value of colonies as sources of food and raw materials has been somewhat greater than their value in providing relief from population pressure, but even here it is easy to overestimate their importance. While access to raw materials is vital to industrial nations, it should be remembered that colonies do not grant monopoly privileges, but merely give the mother countries first claim upon such materials, plus some profit from their exploitation. Very seldom do the colonies of any one country have anything approaching a complete monopoly over an important raw material or resource; and even if they should have exclusive control, the abuse of such monopoly power would almost surely lead to retaliation by other nations. Control over raw materials is of little use to an industrial country unless it has markets for its manufactured products, and these depend upon the development and efficiency of its industries. If a country is so efficient industrially that it can command foreign markets, it can usually secure its raw materials and foods more cheaply by purchasing them in the world markets than by conquering and developing colonial sources of supply.

Indeed, individual industrial countries have seldom found themselves discriminated against in the matter of access to foods and raw materials, except in times of war. Colonies often favor the mother countries in such matters, but usually furnish these products to all other industrial nations on equal terms. At times, the control of the raw materials of colonies has made things difficult for all industrial nations save the mother country, but not for any country in particular. But, it may be asked, are not

⁷ *The Economist*, London, England, April 18, 1936.

colonial sources of supply important in time of war when other sources are cut off? The answer is that such sources of supply are of little value at such times unless the mother country controls water or land routes to its colonies, and such control is often exceedingly difficult to maintain.

Markets. Colonies are of some value as markets for products of the mother countries, but here again their importance is easily exaggerated. Colonial trade is often captured by foreign countries which have the special advantages of unusual efficiency or of favorable location with respect to the colonies. We may cite, by way of example, the inroads of the Japanese textile industries upon the trade of the British colonies. Moreover, colonies in their original state are of little use as markets for the mother country; and an economic and industrial development which would enable them to buy extensively from the mother country is likely on the contrary to make them better able to supply their own needs.

This point is illustrated by the fact that, by 1934, Japan was already reported to be uneasy about the development of new industries in Manchukuo which had begun to compete effectively with similar industries in Japan. Low wages in Manchukuo were said to have given that country advantages in the production of iron and steel, flour, soya bean products, and brewery products. Japan was particularly disturbed over plans for new cotton and wool mills in Manchukuo.⁸ In any case, the extent of colonial trade would be difficult to underestimate. In 1934, England's trade with her colonies, except those which were wholly or partly self-governing, amounted to only 10 per cent of her exports and 7 per cent of her imports, while Germany's colonial trade in the pre-war years of 1912 and 1913 amounted to but six-tenths of one per cent of her exports and one-half of one per cent of her imports.⁹

The Question of Concessions. Concessions obtained by industrial nations in regions which are not politically controlled often appear to be economically justifiable. They may permit the development of backward regions, while retaining a considerable degree of control for, and bringing in some revenue to, the conceding government. To avoid controversy, they should be given for definite periods of time and for well-defined areas only, with adequate safeguards for the nations granting the concessions. It is particularly important, moreover, that they be granted according to the principle of the "open door." That is, the people of different nations should all have opportunities to obtain these privileges. When concessions are inexactly defined, and unequal opportunities are given to the people of different nations, international rivalry is stimulated and bitter diplomatic conflict often results, which may at any time lead to more serious international conflict. The United States has often been involved in trying to protect American concessions and concessionaires in backward

⁸ *Ibid.*, June 9, 1934.

⁹ *Ibid.*, April 18, 1936.

areas from hostile treatment by the governments of these regions, or from the depredations of bandits or revolutionary elements. We have at times landed our marines and engaged in actual combat with armed forces which presumably endangered the safety of our properties and citizens, and have taken over or supervised the revenue systems of backward areas in order to safeguard our interests. Such activities are, of course, dangerous from the international point of view.

Final Estimate of Imperialism. In general, then, the fruits of imperialism have not come up to expectations. Often the policies of industrial nations in backward areas have failed to bring these nations the expected economic advantages. And when successful in this respect, they have frequently led to international friction and ill feeling, and to the development of retaliatory policies and devices. Doubt and fear pervade the atmosphere in a world where the distribution of vital supplies of food and raw materials is left to such devices as discriminatory tariffs, imperialistic policies for undeveloped areas, and monopolies and controls over raw materials. Moreover, international resentment is likely to lead nations to substitute a suddenly destructive course of action for one which is only gradually destructive of economic welfare. In other words, economic warfare may give way to military warfare, undoubtedly to the lasting detriment of all the nations concerned. In the modern world it is silly for any nation to attempt to acquire important territories and resources by military conquest unless that nation is capable of conquering and subduing the world as a whole. And this task, as the two major wars of the twentieth century have indicated, appears to be an insuperable one.

ECONOMIC SELF-SUFFICIENCY

In following a policy of economic self-sufficiency, a nation attempts to produce within its own boundaries all the goods which are necessary to its economic life. Such a policy may be regarded in part as an alternative to imperialism, and in part as preparation for and a tool of war and imperialism. The fascist economics of Italy and Germany were noteworthy for their pursuit of this policy, and we shall draw upon them in illustrating and appraising it.

Increases in Production. A program of economic self-sufficiency is likely to include three parts or phases, one of which is an attempt to stimulate the production of goods the output of which was formerly insufficient for domestic consumption. This phase of the policy is typified by the "Battle of the Wheat," as Italy called her campaign to increase wheat production. Within a few years after 1925, she greatly increased her output of wheat, and announced that it was no longer necessary to import significant quantities of this grain.

While Italy carried on a large-scale land reclamation program, wheat

production was increased primarily by raising the yield of land already in cultivation. The government encouraged the use of fertilizers and farm machinery, induced farmers to plant selected seed-wheat, obtained price reductions for chemical fertilizers and fuel for tractors, carried on research, and furnished technical aids. An intensive propaganda campaign was also carried on. However, the chief factor in increasing wheat production was the high price which the government succeeded in maintaining. Very high tariff duties were placed on wheat, wheat derivatives, and wheat substitutes. The duty on wheat itself was as high as 75 lire per quintal (3.7 bushels), or more than \$1.00 per bushel. Regulations required the use of minimum percentages (sometimes as high as 99 per cent) of home-grown wheat in flour-milling.

The victory was costly to the Italian people, since it raised the prices of all wheat products, and in turn decreased the consumption of such products by about 15 per cent between 1925 and 1935. The total cost of wheat to Italian consumers increased by some 32,000,000,000 lire over the same period.¹⁰ The high prices of wheat and related products seem to have unbalanced Italian agriculture. Farmers abandoned the fruits, vegetables, nuts, grapes, and livestock, for which much of the land is suited, and turned to wheat-growing. Decreased imports of wheat were offset by decreased exports of fruits, oils, and wine, and by increased imports of meat; so that some observers feel that there was scarcely any net gain in the matter of international trade, while standards of living definitely suffered. Similar results were obtained in other parts of this phase of the self-sufficiency program.

The Development of Natural Substitutes. A second phase of the self-sufficiency program involves the development of natural substitutes, or the attempt to use articles which are available in rather large amounts in the place of others which are much scarcer. Examples are the use of alcohol mixtures as motor fuel, castor oil as a lubricant, electric power in the place of coal in railway transportation, plastics for steel in manufacturing, glass for metal in containers, aluminum in the place of tin, zinc in the place of brass and bronze, copper in the place of lead, and more concrete and less steel in building construction.

The Development of Artificial Substitutes. The final phase of the self-sufficiency program is the development of artificial substitutes, or the use of synthetic materials in the place of natural products which cannot be produced at home. In this field, textiles made from artificial "wool" (developed from both wood fiber and skimmed milk) partly supplanted wool and cotton materials in the fascist countries. Synthetic rubber and synthetic gasoline were also produced in substantial quantities. Fish skins were made into imitation leather, and potato peelings into "linoleum" and "corks." An "excellent" butter was made from coal tar. It was discovered

¹⁰ E. R. Sikes, *Contemporary Economic Systems*, New York, Henry Holt & Company, Inc., 1940, p. 427.

that 32 pounds of cheap fish would yield one pound of extract which was said to equal 160 eggs in food value. The German authorities claimed that a saving of 400 million dozen eggs a year was possible through the use of these "Viking eggs."¹¹

The Effects of Self-Sufficiency. The economic consequences of the self-sufficiency program in the fascist countries were not wholly satisfactory. Since farmers and other extractive producers were led to carry production beyond the point at which, as private enterprisers, they would normally have stopped producing, they got into the field of higher costs, with the result that prices were high and individual consumption was restricted. In general, the natural substitutes were less satisfactory than the goods which they replaced. If, for example, better buildings could be constructed by using more concrete and less steel, it is reasonable to suppose that builders would have realized this fact, and acted upon it, long before the adoption of the self-sufficiency policy.

There is abundant evidence that many of the artificial substitutes were mere makeshifts, and that they did not come into popular favor. In the first place, these substitutes were usually costly. Synthetic gasoline cost $3\frac{1}{2}$ times as much as imported gasoline would have cost, synthetic rubber about 4 times as much as natural rubber, and the lowest-priced textiles of artificial wool some 30 to 40 per cent more than natural textiles. Second, these substitutes were often of poor quality—clothing made of artificial wool was stiff, heavy, and disposed to retain moisture, and some at least of the synthetic gasoline was too poor in quality for use in aviation, according to some experts. Finally, the manufacture of substitutes gave rise to fresh problems elsewhere in the economy. If textiles are made of milk or wood, the result may be a shortage of these two essential goods. The use of synthetic rubber in manufacturing required different types of machinery from that used in the processing of natural rubber. Funds had to be found for financing the productive facilities required in producing the synthetic substitutes; and these funds were often taken from established industries, with the result that plant and equipment in these older industries were allowed to run down, and their products became higher in price or poorer in quality, or both. A policy of economic self-sufficiency may be necessary in time of war, but on economic grounds it is a poor substitute for dependence on other countries for essential foods and materials.

THE CONTROL OF RAW MATERIALS BY PRODUCING NATIONS

Though our discussion has related specifically to the attempts of industrial nations to control sources of supply, we must not overlook the fact that the areas producing food and raw materials have themselves taken a

¹¹ P. T. Ellsworth, *International Economics*, New York, The Macmillan Company, 1938, p. 506.

hand in playing the game of restrictionism. While raw material controls have sometimes apparently been set up by groups of individuals or companies in the producing areas, it is usually true that the governments of these areas are genuinely, even if indirectly, interested in the proceedings.

The Conditions for Control. The effective control of a raw material by producers is possible only if certain necessary conditions are met. In the first place, the commodity should be one which originates largely in a single country, although control has sometimes been made effective through the cooperation of two or more producing countries. Again, the material should be capable of being stored over considerable periods of time without deterioration, so that it can be withheld from the market indefinitely if necessary. Third, the principal demands for the material should come from prosperous areas where the burden of rises in price which may occur will not be likely to stir up trouble for the controllers. Finally, the material should be such that new sources of supply cannot be developed except over a considerable period of time. Of course, if the commodity is a mineral which occurs almost entirely in a single area, potential competition is not much to be feared. Among vegetable products, however, those most easily controlled are commodities such as coffee and rubber, in which competition can develop only over the period of six or seven years which is required to bring a plantation into profitable operation.

The Purposes of Control. The principal object of the control of most raw materials is revenue for both the government of the producing country and the individual producers of the goods in question. The government usually obtains its revenue through an export tax on the raw material. Such a tax is likely to be particularly heavy when the country has a virtual monopoly of the desired good, for then the burden of the tax will tend to be paid by the users abroad. Occasionally such control will take the form of a governmental monopoly, and in such cases the revenue for the government is derived from the enhanced prices which the control permits.

The revenue for the producers of the raw material comes from the high prices which they can charge when the production or marketing of the material is regulated under the control scheme. The participation of the government in the plan may run all the way from the mere collection and dissemination of information or the development of a plan for cooperation by the producers, to the passage of legislation for the restriction of output or the maintenance of prices. At any rate, the operation of control plans has often resulted in greater profits for the producers, or has at least permitted them to avoid losses which might otherwise have occurred.

Since these controls are almost never used by industrial nations, but are instead the product of regions which are economically undeveloped, a third purpose of control is sometimes present. This is to protect and encourage the domestic industry utilizing the raw material in question. Of course, the most common method of protecting an industry is to impose

an import duty on the finished product. The same result, however, may be reached, especially when the raw material is largely located in one country, by insuring, through a control plan including an export tax, that the users of this material abroad will receive it on less favorable terms than domestic manufacturers. At times there appears to be no intention of building up an industry in the region producing the raw material. In such cases, if the region is a colony, the manufacturing industry in the mother country is often fostered instead by means of a rebate of a portion of the export tax applied to the raw material.

The Control of Raw Materials by Producers. The various raw material controls may be divided into four groups, according to the degree to which the government of the producing country is interested in the plan. In some cases the control is left for the most part to the producers, with the government taking an indirect interest in the proceedings. An example was the Chilean control of nitrates. Some form of nitrogen is essential in the production of fertilizers, dyes, drugs, explosives, and (in recent years) refrigerants and plastics. For many years the only large source of nitrates was the deposits of sodium nitrate in Chile, and the producers were thoroughly organized for the control of this important material.

The period 1884 to 1914 saw six successive agreements go into effect among Chilean nitrate producers. These agreements covered basic production quotas for individual producers, total annual exports, allowable exports for individual firms as a percentage of basic quotas, penalties for exceeding quotas, reductions of quotas for failure to produce, and transfers of quotas between plants of the same firm. The purpose of the agreements was to raise prices by restricting output, but the agreements were to some extent self-defeating since they kept high-cost producers in operation and provided quotas for new producers who entered the industry. Moreover, there was little incentive, under the agreements, for producers to improve their productive methods.

World War I brought high prices for nitrates but also stimulated the production of by-product ammonia and the development of synthetic nitrogen. In 1919 the Chilean Nitrate Producers Association was formed for the purpose of limiting and allocating output and fixing prices. The Association was the selling agent for all producers, and the members had sales quotas which were transferable between firms. In the next ten years many plants were shut down but continued to receive income from the sale of their quota rights to other firms. The policy of the Association was apparently to charge as high prices as the traffic would bear, and prices during the 1920's were the highest ever experienced in peacetime. Earnings on invested capital ranging from 25 to 50 per cent, or even higher, were reported.¹² However, the Association's price policy, together with advances

¹² B. B. Wallace and L. R. Edminster, *International Control of Raw Materials*, Washington, Brookings Institution, 1930, p. 50.

in chemical technology and the desire for self-sufficiency on the part of a number of countries, resulted in great increases in world capacity to produce nitrates, and prices slumped rather sharply after 1929.

During the long period of control, the Chilean government manifested a strong interest in the affairs of the nitrate industry. From 1882 to 1914 the heavy export tax levied on nitrates amounted to 30 to 70 per cent of the selling price of the product at Chilean ports, and brought in over a billion dollars of revenue for the government, or upwards of 40 per cent of the total ordinary governmental revenues. The export tax was continued at a heavy rate in later years. In 1919, and on other occasions, the government approved the statutes of the Association and assisted in bringing producers into the organization. The government was represented by four members of the eighteen that constituted the Association's board of directors, and it aided the industry through reductions in railroad rates and exemptions from import duties on the bags used in shipping nitrates. In general, the Chilean objectives of high prices and large profits, plus substantial revenue for the government, were well realized up to 1929, but the high prices of nitrates placed a severe burden on foreign consumers, many of whom were in the United States.

Nitrate control as a unilateral policy of Chile came to an end in 1929 with the formation of an international cartel which included, among other members, important German and English producers. This cartel continued, with occasional reorganizations, up to the beginning of World War II. The last cartel agreement, signed in 1938, gave Chile 20.377 per cent of total sales. In Chile itself, control of nitrates by producers, with the government standing by as an interested party, ended in 1931 with the formation of a single large corporation, *Compañía de Salitre de Chile* (Cosach), which represented the amalgamation of private and public interests in a state monopoly. The government had four directors out of twelve on the board of Cosach, but the government directors had veto powers in many matters, including prices and sales. After the dissolution of Cosach in 1933, a 1934 law provided a 35-year state monopoly in the foreign sale of Chilean nitrates, through the Chilean Nitrate and Iodine Sales Corporation. This corporation was to determine prices from time to time, and to purchase from producers the amounts necessary for exports. The government was to receive 25 per cent of the profits of the corporation in lieu of revenue from an export tax.

Raw Material Control by Legislative Enactment. The severe depression in the rubber industry following World War I and the failure of attempts to promote voluntary cooperation among the growers, led to the passage of legislation in British Malaya and Ceylon in 1922 which has come to be known as the Stevenson Restriction Act. The purpose of the Act was to bring back prosperity to the rubber growers by raising prices through the restriction of exports and control of production. The opera-

tion of the Act was somewhat complicated. Each plantation was assigned a "standard production" based upon its production for 1920, with allowance for new areas. "Standard production" for most plantations probably ran around 80 to 85 per cent of capacity. Exportation at the minimum rate of export duty was permitted to each plantation up to a certain percentage of standard production. For greater amounts, the export duty became so heavy as to prohibit exports, for all practical purposes. The percentage of standard production which could be exported at the minimum rate of export duty varied as the price of rubber in London oscillated about a "fair price" per pound.

The Stevenson Act had the effect of restricting the output of rubber, at least temporarily, and also encouraged speculation in rubber. It was successful in stabilizing conditions in the industry and in bringing prosperity by raising prices, but just how much credit for the rise in prices should go to the Act and how much to other factors is not apparent. At any rate, the spot price of rubber in New York rose from a low of 13.9 cents a pound in August, 1922, to the high mark of \$1.048 a pound in November, 1925, and then fell to 18 cents in December, 1928.¹³ During this period, immense profits were made by the rubber producers. Dividends for British rubber companies, which had ranged between 6 and 12.5 per cent in 1923 and 1924, varied between 17.5 and 55 per cent in 1925 and 1926. One estimate has it that this raw material control cost the United States about \$540,000,000 from 1924 through 1926.¹⁴ Part of this extra cost was borne by the manufacturers of rubber articles in this country and part was passed on to consumers.

The decline in the price of rubber after 1925 was the result of several forces. The anxiety of American industrial consumers over future supplies of this raw material was to some extent alleviated; world production of rubber was steadily increasing, especially in non-British areas where the control did not apply; and the demand for crude rubber was lessened by means of the greatly increased use of reclaimed rubber. The Stevenson Act aroused a chorus of protest, with the United States as chief protestant. The Act was finally repealed in 1928, when it became evident that it had outlived its usefulness.

The price of crude rubber slumped badly in the post-1929 depression years, and reached a low of 3.43 cents a pound in 1932. Control over rubber production was soon reimposed, but this time on an international basis. In 1934, the United Kingdom, India, Holland, France, and Siam reached an accord known as the International Rubber Regulation Agreement. With two extensions, this agreement continued in operation until April 30, 1944. Basic quotas were set up for nine producing regions. The International Rubber Regulation Commission periodically fixed uniform

¹³ *Ibid.*, pp. 188, 189.

¹⁴ *Ibid.*, pp. 212, 213.

percentages of basic quotas which the regions could export without penalty, and the participants agreed to limit exports to these amounts. New plantings of rubber trees were strictly prohibited. The International Rubber Regulation Agreement provided a much better system for market stabilization than had the Stevenson Plan. During the period of its operation, rubber prices fluctuated to some extent but were generally profitable for producers, and the furore created by the earlier control scheme did not reappear.

Control Through Government Aid to Producers. Probably the best example of this type of control was the Brazilian control of coffee. This plan was provided for by legislative enactment, but it differed from the control of rubber in that direct financial aid was given by the government to the coffee growers. After three successful "valorizations" of coffee, during which coffee was bought up and withheld from the market and restrictions were placed upon its export and the planting of new trees, a plan for the "permanent defense" of coffee was adopted. The law providing for such defense was passed in 1922, but the national government withdrew in 1924 and the measures for the protection of coffee were put into operation by the State of São Paulo (which produces 70 per cent of Brazil's output of coffee) in 1925. Control was placed in the hands of the Institute for the Permanent Defense of Coffee, which was composed of five members.

The main purpose of the permanent defense was the stabilization of prices through the regulation of the amount of coffee coming on the market. The State of São Paulo owned an extensive system of warehouses, in which some 8 million to 12 million bags of coffee could be stored until market conditions permitted their sale. Planters were required by law to turn over all their coffee to the warehouses of the Institute, and at times were able to get as much as 75 per cent of its market value as a loan from the government. Funds for loans to the planters and for general expenses were obtained both by borrowing and by taxation.

By these methods it was possible for the Institute to maintain a high level of prices for some time. Until 1927 no great accumulation of coffee in the warehouses took place because world consumption was keeping pace with production. Beginning with the bumper crop of 1927-28, however, production far outstripped consumption, and prices could be maintained at anything like a satisfactory level only by amassing a tremendous surplus of coffee in the warehouses of the Institute. It was expected that by the middle of 1930 this reserve would be only just short of the amount annually consumed in the world. The strain proved too much for the credit of the Institute, and the price of coffee collapsed late in 1929. All Brazilian banks were in dire straits because of frozen assets, and the situation was saved only by obtaining an immense loan from abroad.

Following this emergency, control of the coffee situation was again taken over by the Brazilian government. In 1931, an export tax payable by the

exporter was imposed on coffee, and the proceeds were used to buy up and destroy considerable quantities of low-grade coffee. This program was continued on a larger scale in 1932. In 1933, the coffee crop was unusually large and the government decreed that planters must turn over 40 per cent of the crop for destruction, at a price covering approximately the direct (variable) costs of production.¹⁵ In 1937, the government abandoned its attempt to control the price of exported coffee, and, though the price fell, sales increased by more than enough to offset price decline. In 1938 and 1939, the planters gave up 30 per cent of the crop for destruction, and 25 per cent was destroyed in 1940. Coffee sold to the government for destruction was paid for at the very low rate of 2 milreis (10 cents) per bag. The State of São Paulo also bought coffee for destruction in 1940, and it was hoped that the quantity of new coffee placed on the market would be reduced from 20,000,000 to 11,500,000 bags, as a result of the two programs.¹⁶

Late in 1940 the control of coffee, like that of rubber and nitrates, became international, upon the formation of the Inter-American Coffee Agreement between the United States and fourteen Latin American countries. The plan was administered by an Inter-American Coffee Board of 36 members, 12 of whom represented the United States. Quotas were developed for the fourteen Latin American countries after considerable negotiation, and each country undertook to do its own enforcing. The United States agreed to limit its imports accordingly. The agreement had no provision concerning the prices of coffee, but generally higher prices prevailed until the outbreak of World War II. The United States was protected from exploitation, however, since it controlled one-third of the Board members and because the agreement provided that the quotas to be imported by this country could be increased by vote of one-third of the Board members.

Control by Governmental Monopoly. It is only a step from control through a governmental plan, with public funds and facilities, to control by governmental monopoly. An example of the latter type of control is the pre-war Japanese camphor monopoly. Camphor is used chiefly for the making of celluloid, and the moving picture industry is consequently dependent upon it. Camphor is also an important element in the manufacture of pyroxylin products, including non-breakable or shatterproof glass.

The monopoly control of camphor has been carried on with a dual purpose. It was desired, of course, to bring in revenue for the government, and it was hoped that the domestic manufacture of refined camphor and camphor products would be encouraged. The Japanese government has

¹⁵ J. W. F. Rowe, *Markets and Men*, New York, The Macmillan Company, 1936, pp. 43-46.

¹⁶ *Commercial and Financial Chronicle*, May 18, 1940, p. 3225.

had complete control of the industry. No one could go into the forests to collect raw camphor by distillation of the wood of the camphor laurel tree except operators licensed by the government. Thus both the quantity to be produced and that to be sold at home and abroad have been arbitrarily determined. In addition, the government set both the price for the sale of camphor and the price to be paid to the operators who collected it.

The monopoly was quite successful, for a time, in maintaining high and profitable prices. The price of camphor doubled within two years after the establishment of the monopoly, and prices were well maintained in the face of constantly growing production and sales. The power of the monopoly to set a high price was greatly weakened in recent years by the competition of synthetic camphor. This product can be widely substituted for the natural camphor, and is even preferred for some purposes. Its production on a commercial scale at reasonable cost resulted in a modification of the price policy of the Japanese monopoly, which may be further modified by conditions imposed on Japan by her conquerors.

The Results of Raw Material Controls. Our discussion has indicated that schemes for the control of raw materials and foods have met with varied success, though in some cases and in some periods of time they have been able to control production, raise prices, and furnish large profits for producers. In most cases the controls have been strongly resented by countries which, having need for these raw materials and foods, suffered under the burdens imposed by the controls and visualized a time when they might be cut off completely from their supplies of essential commodities. Like the measures used by imperialistic nations, raw material controls have been a potent source of international friction and ill will.

We have noted a tendency for raw material controls, even when instituted by a single country, eventually to become international in scope. In addition to the cases we have mentioned, international combinations or cartels, in their several fields, have been able to control the following percentages of the world output of certain materials: copper, 95 per cent; bismuth, 90 per cent; zinc, 97 per cent; copra, 80 per cent; and whale oil, 80 per cent.¹⁷ These, indeed, are only a few examples from a long list of international cartels, which includes steel, aluminum, potash, cement, dyes, mercury, tin, and rayon combinations. Several advantages are claimed for international combinations. They are said to reduce the number of middlemen and the cost of their services; to eliminate cross-handling, the unnecessary payment of import duties, and dumping; and to cut down advertising and selling expenses. However, the usual results of successful international combinations are restricted production, high prices, and large profits.

¹⁷ *Encyclopædia of the Social Sciences*, vol. xiii, p. 131.

ECONOMIC INTERDEPENDENCE IN THE FUTURE

The National Approach. We have yet to consider what can be done about the problems resulting from the economic interdependence of nations. In general, little success seems likely to attend the efforts of any one nation to deal individually with these problems. The United States, for example, can do little when confronted by an international cartel which controls a material that we are unable to produce, or by a preferential tariff designed to exclude us from colonial markets—for the activities to which we take exception are carried on outside the jurisdiction of this country.

Action has sometimes been taken in the United States to try to improve the raw material situation, but little has been accomplished. Congressional investigations have been conducted and occasionally funds have been appropriated to promote the production in this country of materials which have been subjected to control by foreign countries. When public denunciation of some type of control has been particularly vigorous, the Department of Justice has brought suit against the American agents of foreign monopolies in the attempt to restrain their activities, but the suits have seldom been successful. The government has also been instrumental in preventing in this country the flotation of loans for the benefit of foreign materials and food controls, but these loans have never failed of flotation in some other country or countries.

The principal nationalistic alternative to such feeble attempts at relief is retaliation, with control matched against control and restriction against restriction. As we have seen, however, retaliation is a dangerous policy. It almost never helps solve the original problems but, on the contrary, complicates them. There is no nation so strong that it can bring economic pressure to bear upon other nations without fear for itself, or so rich in economic resources that it can be highly prosperous without placing a considerable amount of economic dependence upon other nations. If each nation carried the control of foods, raw materials, and markets to the n th degree, the result would be the destruction of international exchanges, and economic disaster for all.

The International Approach. There can be little doubt, then, that the approach to the problems of economic interdependence should be international in character. Although relatively little has been accomplished in the past by way of bringing about international cooperation in these matters, the prospect for the future is considerably more promising. The various international organizations which we have described in the two preceding chapters, such as the International Monetary Fund, the International Bank for Reconstruction and Development, and the Economic and Social Council of the United Nations, have among their objectives (1) the elimination or reduction of protective tariffs and export duties,

export and import quotas and licensing, foreign exchange controls, currency depreciation, multiple currency devices, barter trading arrangements, and other restrictions on and obstacles to trade; (2) the stabilization of national monetary systems and foreign exchange relationships; and (3) the promotion and facilitation of international loans and investments as needed for development and reconstruction.

If these organizations operate according to plan, the result should be a genuinely international solution for the problems of economic interdependence. The nations of the world will then have access on equal terms to the foods, minerals, raw materials, and other essential products they require, and to the markets of the world on the basis of competitive efficiency in selling their products. Moreover, they will find it cheaper to buy the economic goods they need, and to compete freely for markets, than to try to conquer or otherwise secure exclusive control over areas which will serve as markets and sources of essential goods, or to follow a policy of economic self-sufficiency at home. The international cooperation which is in prospect will not directly solve the problem of population pressure, but it will help the several nations to take care of their populations as well as possible through the most effective use of their resources and those of other countries. It is too much to expect that these international organizations will operate perfectly, but they will find it difficult to produce conditions worse than those which have existed in the past in their absence.

1. What has been the relation between population growth and industrialization?
2. How have industrialization and the development of large-scale production led to economic interdependence among nations?
3. "The United States is economically self-sufficient and need not depend on other countries for her economic welfare." Do you agree?
4. Why have colonies been sought by the great industrial nations?
5. What two tariff policies have nations commonly adopted in connection with their colonies? Distinguish carefully between them.
6. What is the difference between a colony and a protectorate? Between a protectorate and a mandate? Explain.
7. What are concessions? Of what importance are they in our modern economic world?
8. "Imperialistic adventures of nations were confined to the last century and have not been known in recent years." Do you agree? Explain.
9. Have colonies generally been helpful to industrial nations in affording relief from population pressure? Explain.
10. How important have colonies been to industrial nations as sources of foods and raw materials? Explain.
11. "Colonies have usually solved the mother countries' problem of finding markets for manufactured products." Discuss.

12. How have imperialistic policies affected the relations between industrial nations?
13. Is a policy of national economic self-sufficiency an alternative to imperialism or a tool of imperialism and war? Explain.
14. "A policy of economic self-sufficiency is likely to have three distinct parts or phases." Explain.
15. What are the economic results of the policy of economic self-sufficiency? Explain.
16. "A policy of economic self-sufficiency is indefensible on economic grounds." Explain.
17. Why have controls over raw materials been instituted by many countries producing raw materials? Explain.
18. Under what conditions are these controls most likely to succeed?
19. What has been the basis, in this chapter, for classifying controls exercised by producing countries over raw materials?
20. Give an example of each type of raw material control.
21. What have been the results of controls over raw materials by producing countries?
22. Why has the national approach to the problems of the economic interdependence of nations been both ineffective and dangerous?
23. "The prospects of a genuinely international approach to the problems of economic interdependence are now brighter than ever before." Explain.
24. What results may be expected from the functioning of the various international organizations which have recently been set up? Explain.

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PART SEVEN

Government and Economic Life

Public Expenditures and Public Borrowing

"GOVERNMENT," IT HAS BEEN SAID, "AS A FORM OF SOCIAL ORGANIZATION, has developed because, in the long run, it has afforded the means of supplying men with certain services more efficiently and more economically than these could have been supplied by each for himself."¹ All economic systems of the present day are marked, to a greater or smaller extent, by division of labor. Each individual performs a single function, or a limited number of functions, and trusts to others to furnish him with the wide variety of commodities and services which he does not produce for himself. In the case of some services it seems the part of wisdom to look to the government for a more satisfactory performance than could be expected from private individuals or companies. The delegation of the provision of such services to and their performance by the government may be viewed simply as a part of division of labor.

The Nature of Governmental Functions. These functions which are performed collectively rather than by individuals are of several kinds. Some services, such as furnishing protection or maintaining law and order, would be very difficult, if not impossible, for the citizen to perform for himself. Others that could be and sometimes are carried out by private companies are often turned over to the government in the hope that they will thus be performed more efficiently or cheaply. Examples are the provision of water and electricity by municipalities. Still other functions must be performed by the government, if they are to be done at all, because an individual's share in the resulting benefits is so small or so long deferred that he would not be moved by self-interest to undertake them himself. The establishment of institutions for dependents and defectives may be cited as an example. Even when an activity is left in the hands of private individuals, the government is often called upon to exercise a restrictive and regulatory influence. Thus we have a Pure Food and Drugs Act, a Sherman Anti-Trust Act, a Securities Act, and other legislation designed to protect the interests of the public. The exact nature of the individual

¹ H. L. Lutz, *Public Finance*, New York, D. Appleton & Company, Inc., 1936, p. 1.

governmental functions will become apparent as we discuss the expenditures of federal, state, and local governments.

Governmental Functions and Expenditures. The functions of these governmental units, though they differ in many particulars, are alike in one respect—they all involve the expenditure of funds. There has been a marked tendency for public expenditures to increase during the past few decades, not only in the United States but in other countries, and for both the national and other governmental units. The increasing activities and expenditures of governments involve problems of vital importance to everyone. One problem is to decide to what extent we may best satisfy our desires by the collective utilization of our resources, natural and human, rather than by leaving to private individuals the task of providing certain needed commodities and services. That is, we must consider how large a part of our real income we wish to receive collectively rather than individually. The discussion of this problem ordinarily assumes that the great bulk of economic activities will be left in private hands and that the economic system as a whole will continue to operate in capitalistic fashion.

A second and very important problem is to decide whether the government may properly use its fiscal policy to control the operation of the economic system as a whole. Should the functions of government include the assumption of responsibility for the successful operation of the economic system? Should the government, through its expenditures and other elements of fiscal policy, attempt to maintain the aggregate demand for goods in the economy so that a high and stable level of production, income, and employment will be attained? Are such governmental functions and expenditures compatible with the continued operation of a capitalistic type of economic system? Questions of this kind are very definitely at issue at the present time.

INCREASES IN PUBLIC EXPENDITURES

Expenditures of the Federal Government. In investigating the problems of public expenditures, let us consider first the increase in public expenditures in the United States and the nature of these expenditures in recent years. The expenses of our federal government increased from \$517,000,000 in 1903 to \$725,000,000 in 1913, to \$3,437,000,000 in 1928, and to \$12,711,000,000 in 1941.² The increase from 1903 to 1941 was 2358 per cent. However, even the large expenditures of 1941 were smaller than those of some years during World War I, and very small indeed by comparison with those which were yet to come. During World War II, federal expenditures skyrocketed to a peak of \$100,405,000,000 in 1945, or

² *Report of the Secretary of the Treasury*, 1928, p. 418; Board of Governors of the Federal Reserve System, *Banking and Monetary Statistics*, p. 513.

about eight times the 1941 expenditures, before declining to \$65,019,000,000 in 1946.⁸

Expenditures for protection (national defense) are always a very important item in the federal budget. In 1945, as we see in Table 48, direct expenditures for national defense amounted to \$90,029,000,000, or 89.7 per cent of the total federal expenditures. If expenditures for interest on the public debt and for veterans' pensions and benefits are included, the total cost of national defense amounted to 95.3 per cent of all federal expenditures. In 1946, expenditures for national defense were 74.7 per cent of the total expenditures, or 88.5 per cent if the expenditures for interest on the public debt and for veterans' pensions and benefits are

TABLE 48. EXPENDITURES OF THE FEDERAL GOVERNMENT, FISCAL YEARS 1945 AND 1946

(Source: *Federal Reserve Bulletin*, September, 1946, p. 1049, and *The Economic Almanac for 1946-47*, New York, National Industrial Conference Board, Inc. 1946, p. 293.)

Type of Expenditure	Amount Spent in 1945 (in millions)	Per Cent of Total Expen- ditures, 1945	Amount Spent in 1946 (in millions)	Per Cent of Total Expen- ditures, 1946
National defense	\$ 90,029	89.7	\$48,542	74.7
Interest on the public debt	3,617	3.6	4,722	7.3
Veterans' pensions and benefits	2,060	2.1	4,253	6.5
Aids to agriculture	834	0.8	1,110	1.7
Relief and work relief	567	0.6	670	1.0
Public works	319	0.3	389	0.6
Transfers to trust accounts (social security, etc.)	1,646	1.6	1,918	3.0
General government	1,008	1.0	1,453	2.2
Other expenditures	325	0.3	1,962	3.0
Total expenditures	\$100,405	100.0	\$65,019	100.0

included. The total cost of national defense clearly includes expenditures for the benefit of veterans, and would include all payments of interest on the public debt of the federal government if this debt were large solely because the federal government, in certain past years, had spent for national defense at a more rapid rate than could be covered by the ordinary governmental revenues of those years. As a matter of fact, however, a minor part of the public debt resulted from governmental borrowing to finance heavy expenditures during the post-1929 depression.

Expenditures for such purposes as public works, relief and work relief for the unemployed, social security, and aids to agriculture, which amounted to 27.9 per cent of the total as recently as 1941, were relatively

⁸ *Federal Reserve Bulletin*, September, 1946, p. 1049. All the figures for federal expenditures are for fiscal years running from July 1 to June 30. Thus, the 1945 fiscal year included the period from July 1, 1944, to June 30, 1945.

unimportant in 1945 and 1946. The cost of maintaining and operating the ordinary departments of government was only 1.0 per cent of the total federal expenditures in 1945 and 2.2 per cent in 1946. Total federal expenditures were about \$727 per capita in 1945 and \$466 in 1946, as compared with \$92 in 1941. (Preliminary estimates for the fiscal year 1947 indicated that federal expenditures would total about 42½ billion dollars, including 17 billions for national defense and 5 billions for interest on the public debt.)

Expenditures of State Governments. The state governments of the United States spent a total of \$207,000,000 in 1903, \$359,000,000 in 1913, \$1,753,000,000 in 1928, and \$3,588,000,000 in 1944.⁴ The increase from 1903 to 1944 was 1633 per cent. As we see in Table 49, the largest state

TABLE 49. EXPENDITURES OF STATE GOVERNMENTS IN 1944

(Source: *The Economic Almanac for 1946-47*, New York, National Industrial Conference Board, p. 311.)

Type of Expenditure	Amount Spent (in millions)	Per Cent of Total Expenditures
General government	\$ 172.0	4.8
Public safety	145.1	4.0
Highways	711.2	19.8
Natural resources	94.6	2.6
Health	20.4	0.6
Hospitals	282.5	7.9
Public welfare	516.4	14.4
Correction	80.7	2.3
Education	1073.6	29.9
Interest	92.6	2.6
Miscellaneous	399.2	11.1
Total expenditures	\$3588.3	100.0

expenditures in 1944 were for such items as education (29.9 per cent), highways (19.8 per cent), and public welfare (14.4 per cent). Less important items of expenditure included general government, public safety, natural resources, health, hospitals, correction, and interest on state debt. State expenditures in 1944 amounted to over \$26 per capita.

Expenditures of Local Governments. Local governments in the United States spent a total of \$912,000,000 in 1903, \$1,783,000,000 in 1913, \$6,067,000,000 in 1928, and \$4,604,000,000 in 1944.⁵ The increase from 1903 to 1928 was 554 per cent, whereas that from 1903 to 1944 was only 405 per cent. Data covering the detailed items of expenditure by all local

⁴ National Industrial Conference Board, *The Economic Almanac for 1946-47*, New York, 1946, p. 286. The data include only expenditures from state funds, and not grants from the federal government to the states.

⁵ *Ibid.*, p. 286.

governments are not available, but we can get an idea of the nature of these expenditures by examining those of cities with 25,000 population or over in 1944, as shown in Table 50. Here we see that the largest expenditures were for education and public safety, which amounted to 21.4 and 21.0 per cent of the total, respectively. Less important items of

TABLE 50. EXPENDITURES OF CITIES WITH POPULATION OVER 25,000 IN 1944

(Source: *The Economic Almanac for 1946-47*, New York, National Industrial Conference Board, 1946, p. 311.)

Type of Expenditure	Amount Spent (in millions)	Per Cent of Total Expenditures
General government	\$ 165.2	7.2
Public safety	481.5	21.0
Highways	170.9	7.4
Sanitation	165.8	7.2
Health and hospitals	157.9	6.9
Public welfare	185.7	8.1
Correction	19.1	0.8
Education	490.8	21.4
Recreation	80.7	3.5
Contributions to trust funds and public service enterprises	164.7	7.2
Interest	147.0	6.4
Miscellaneous	68.1	2.9
Total expenditures	\$2297.4	100.0

expenditure included general government, highways, sanitation, health and hospitals, public welfare, correction, recreation, interest, and contributions to trust funds and public service enterprises. Total expenditures of federal, state, and local governments in 1944 amounted to about \$730 per capita, and were almost two-thirds as great as the total national income.

CAUSES OF INCREASES IN PUBLIC EXPENDITURES

Increase in Population. Among the more obvious causes of larger public expenditures in this country is the steady increase in the number of persons for whom governmental services must be performed. This growth in population, even if it called for nothing more than a duplication of existing governmental machinery, would bring about at least a proportional expansion in expenditures, unless it were found possible to render governmental services on the basis of mass production, with a decreasing cost per individual served. Unfortunately for our hopes in this direction, the performance of functions by the various governmental organizations seems to be subject to a law of increasing rather than decreasing costs; that is,

an increase in the number of individuals cared for often involves a greater than proportional increase in the cost of rendering the services in question.

Not only does the performance of a given number of functions for an increasing number of persons bring with it an increase in the costs of government, both absolutely and per capita, but in addition it often happens that a growth in population causes an expansion of the needs which it appears necessary or wise to satisfy collectively rather than individually. A growth in the population of a city, for example, usually brings about an expansion in the number of functions to be performed by (say) the police department, and does not mean simply that the same functions will be performed as before, though for a larger number of persons. This explains why the financial statistics of cities show a fairly steady per capita increase in public expenditures, as we pass from the smallest cities to the largest.

Changes in General Prices. Changes in the general price level and the purchasing power of money constitute another cause of the growth of public expenditures. The general price level in the United States was slightly higher in 1913 than in 1903, and was much higher in 1928 than in either of these two other years. The price level in 1941 was lower than in 1928, but in 1945 and 1946 it was considerably higher than in 1928. The national, state, and local governments, in order to render the services expected of them, must be able to obtain materials and supplies, and in general to gain access to the factors of production much as does any business man. The governments, in other words, must enter into competition with private individuals and corporations for the use of the necessary agents of production. Hence, when the prices of goods and productive factors rise, governmental expenditures must increase also, even though there is no change in the number of functions performed, or in the intensity with which they are carried on. Part of the increase in public expenditures since the turn of the century has been nominal rather than real, representing, it is true, the handling of more dollars, but not the expenditure of greater purchasing power. However, after all allowances are made for changes in the purchasing power of money, there still remains a very large growth in public expenditures to account for.

Inefficiency in the Appropriation of Public Funds. A factor which ranks high in the popular mind as a cause of increasing public expenditures is carelessness and extravagance in making appropriations for various purposes, combined with a lack of business methods, if not downright corruption, in the administration of public funds. Actually these evils can scarcely be an important cause of increasing public expenditures unless they themselves tend to increase in severity with the passage of time, but they may be an ever-present reason why public expenditures are greater than they need to be in view of the functions performed by governments.

The appropriation of funds with which to carry on the functions of the various governmental units in the United States is in the hands of elected representatives, that is, members of national and state legislatures and of city councils. Under our political system it often happens that the qualities which make it possible for a man to be elected to such an office are not those which will make him an expert in administering the duties devolving upon him. Public expenditures are determined, as a result, largely by men who lack training in economic principles and an understanding of economic problems. As a consequence, appropriations are often made in a haphazard and piecemeal fashion, some being entirely too small and more being disproportionately large, with each individual appropriation quite unrelated to any sum which might be regarded as an appropriate total.

Some improvement in this situation has taken place in recent years, since many of the governmental units, including the federal government itself, have adopted budget systems. A budget does afford some check upon appropriations, and it fixes to a certain extent the responsibility for them. However, it seems evident with each passing Congress that the evils mentioned above have not been completely eradicated. Indeed, it is likely that they cannot be eliminated until some change takes place in the attitude of large numbers of citizens toward the appropriation and expenditure of public funds.

The Popular Attitude Toward "Public Money." The democratic form of government assumes that most voters will be intelligent and socially minded; that is, that they will know how best to serve their own interests and those of others, and that they will be sufficiently unselfish to take into consideration the broad social interests rather than their own personal gain. One is tempted to doubt that this assumption is well founded, especially when one observes the attitude of some persons toward the funds of the federal government. Many people seem to regard the federal treasury as a vast reservoir into which flow mysterious but inexhaustible streams of wealth. It appears to such people that the problem in connection with the treasury is not one of economy in appropriations and expenditure, but rather that of seeing to it that their particular district or locality receives its full share of the funds—or more than its share, if possible. Representatives in the national legislature are conceived of by their constituents as agents of their district, whose duty it is to insist that an appropriate portion of governmental funds shall be diverted in its particular direction. Representatives are instructed to "bring home the money or don't come back."

The only way a representative is likely to be able to get through, for his district, an item in the appropriations bill is by enlisting the support of other members by promising to vote for the favorite projects of these members, or, in other words, by engaging in what is commonly called

"logrolling" or "back-scratching." Examples of this practice are to be found in the river and harbor bills, the public buildings bills, the army and navy bills, and in most of our recent tariff bills. Scrambles for federal funds were apparent in connection with the public works and relief programs of the Roosevelt administration during the great depression of the 1930's, and again in the large expenditures during World War II. It may be noted, also, that those who complain loudly about federal extravagance and waste often grab vigorously at whatever federal funds are to be had. The probability of obtaining scientific and economical appropriations and expenditures in the face of such processes and attitudes is small.

Wastes in the Administration of Public Funds. In the administration of governmental funds, as well as in the appropriation of such funds, undesirable practices may be noted. It is difficult to obtain proper administration of offices and funds, even given the best of efforts and intentions. When the holding of such offices is dependent upon the vagaries of political fortune. It is true that under our Civil Service Laws we have some slight modification of the old-fashioned "spoils system," under which appointments to government positions were generally regarded as a legitimate part of the fruits of victory at the polls; but there is still a high rate of "turnover" in offices which must be characterized by security of tenure if efficiency is to prevail. Certainly, the folly of electing by popular vote officials who are to hold positions requiring technical knowledge and training should be apparent to everyone.

Though there are many public officials in the employ of the various governmental units who serve faithfully and well for modest salaries, it must be admitted that there are others who expend public funds in a wasteful and extravagant manner. This waste may take a variety of forms. In some cases the payrolls are padded—that is, more persons are employed than are needed to carry on the functions of government, and members of an administrator's family are often placed in appointive positions. Sometimes the quantities of supplies and equipment purchased are unnecessarily large, or the prices paid are unreasonably high in view of the quality obtained. Again, contracts may be awarded to those who have not submitted the most favorable bid for the work in question. We do not mean, of course, that only in governmental hands are funds wastefully expended, for much waste occurs also in private business expenditures.

The Expansion of Governmental Functions. But after due allowance has been made for growth of population, changes in the price level, and possibly other factors, the chief explanation of increasing public expenditures is to be found in the continually growing number of functions being performed by federal, state, and local governments. This expansion of functions in turn has been largely the result of such things as the great and pressing economic problems that have arisen as our economic system

has increased in size and complexity, the growing conviction that social welfare can and should be advanced by collective action through government, and the more recent notion that the government can and should assume direct responsibility for the satisfactory operation of the economic system as a whole and for the maintenance of a high level of income, production, and employment.

Economic Problems and Public Expenditures. With the development of our economic system, production has become highly specialized, round-about, and large scale. The economy has become increasingly dependent upon a smoothly functioning system of exchange, and economic interdependence has increased. As the economic system grew larger and more complex, problems developed which often caused distress to large numbers of people and seemed to call for collective action. Examples are problems of money and banking, public utilities, transportation, monopolies and trusts, labor relations, and the issuance of securities. In many cases the attempted solutions have involved governmental regulation which has not required large public expenditures though it has added greatly to the list of governmental functions. The people in the economy continued in general to hold to the capitalistic principle that governmental interference with and control over the economic activities of private citizens is in itself not a good but an evil. However, they were willing to embrace this evil in cases in which it appeared to be the means of avoiding or eliminating a greater evil. Governmental regulation in connection with such individual economic problems did not keep the economy as a whole from operating on a capitalistic basis.

Welfare Activities and Public Expenditures. State and local governments now spend large sums for highways, education, and public welfare in general. Such expenditures are thought to make for the development of our people and their economic activities, and hence for the general welfare. When the automobile was first introduced, highway construction and maintenance could be provided at a cost which would now seem remarkably low. However, the use of the automobile for pleasure has increased so rapidly that a car is at present regarded by most families as a necessity, and its use for commercial purposes has grown almost as rapidly. Traffic on the main highways has become extremely heavy, and the expense of constructing and maintaining macadam and concrete surfaces which will support giant motor trucks is very high.

As an economic system increases in complexity, it becomes more and more apparent that adequate preparation for one's life work is essential to the achievement of a high measure of success, and it becomes extremely difficult for a person to rise from the ranks if he depends upon his native ability unaided by occupational training. Also, as standards of living improve, greater educational facilities are demanded and obtained. For these and other reasons, we are at present attempting by collective action

to provide everyone with a certain minimum amount of training, and to assist as many as possible to pursue higher education. Since little or no effort is made to place most of our educational activities on a self-supporting basis, the cost in the form of public expenditures is large.

There have been other large increases for hospitals, clinics, health and sanitation, recreation, and institutions for delinquents, dependents, and defectives. In the dreary days when the insane were left to "mumble in the chimney corner," when the feeble-minded were allowed to roam at will and were merely regarded as a bit queer, when sickness or even plagues were thought to be marks of divine disfavor or of evil spirits rather than results of lack of sanitation, and each family was expected to pay for its own medical attention or to go without, governmental expenditures for such purposes were not large. But nowadays we regard the satisfactory handling of these matters as vital to the public welfare, and undertake to provide for it through governmental agencies. Provision of this kind is praiseworthy, but it is also expensive.

Governmental Functions and Expenditures in the Great Depression.

The idea that the federal government should assume direct responsibility for the satisfactory operation of the whole economy came to the fore in the depression years following 1929. The United States had many business depressions prior to 1929, but the earlier depressions had been allowed to run their course, apparently on the principle that recovery attained in the "natural" manner would be prompt and lasting. But in the post-1929 depression there was a widespread demand that the government take action both to promote recovery from the depression and to relieve the millions of unemployed and destitute. The response of government to this demand resulted in greatly expanded functions and enormous public expenditures.

One important depression activity was caring for the unemployed, numbering over 12 million persons at the worst of the depression. Most of these people, if unassisted, would have been not only unemployed but completely destitute, lacking even those minimum resources necessary to keep body and soul together. With state and local governments apparently unable to handle the problem, the federal government lent a helping hand. Its activities in behalf of the unemployed, through the Public Works Administration, the Civil Works Administration, the Civilian Conservation Corps, the Works Projects Administration, and assistance given the states in providing direct relief, were very costly. From 1933 to 1941, inclusive, the total expenditures for unemployment relief were about \$18,000,000,000, or \$26,000,000,000 if public works are included as a part of unemployment relief.

American agriculture was in a very critical condition following World War I, and suffered still further losses during the depression. The agricultural problem and its treatment by the government will be examined in Chapter 45, but we may note here that the condition of agriculture

during the depression was so serious as to constitute a severe drag on general recovery, in addition to being a difficult problem in itself. The federal government, through the Agricultural Adjustment Administration, the Farm Credit Administration, the Commodity Credit Corporation, and other agencies, attempted to regulate agricultural production, raise the prices of farm products, refinance farm mortgages, and lend the farmers credit on their holdings of various crops. The expenditures for these purposes were more than a billion dollars in certain years, and totaled over \$5,000,000,000 for the period from 1933 to 1941, inclusive.

Other federal activities designed to promote recovery were less costly than those already mentioned. They included financial assistance to railroads, banks, and other institutions through the Reconstruction Finance Corporation; the refinancing of the obligations of home owners other than farmers; the promotion of the rehabilitation of industry and business through self-regulation under the National Recovery Administration; insurance for bank depositors through the Federal Deposit Insurance Corporation; the Subsistence Homesteads Projects; and the Emergency Housing Program. At the same time the federal government undertook other activities which seemed to be dedicated to reform rather than or in addition to recovery from the depression. Examples included the regulation of the issuance of new securities and of the activities of security exchanges through the Securities and Exchange Commission under laws of 1933 and 1934, the regulation of the public utility industry through the Securities and Exchange Commission and the Federal Power Commission under the Public Utilities Act of 1935, and various activities for the benefit of labor carried on under the National Labor Relations Act of 1935 and other laws.⁶

The War Period. Most of the depression activities of the federal government were still going full blast when World War II began. When the United States entered the war, governmental control over the economic activities of the country increased greatly and soon dwarfed anything that this country had ever before experienced. Long before the war was over, agencies of the federal government were controlling output in many branches of production; the prices of commodities and services; wages and salaries; rents; the allocation of essential materials and equipment among industries and businesses; the allocation of labor among industries, businesses, and the armed forces; industrial relations in many industries; imports and exports; the apportionment of certain scarce consumers' goods among the individual people; and many other things. While many persons questioned whether all of these governmental con-

⁶ In practice, the distinction between recovery and reform activities was not at all clear cut. Many activities dedicated to recovery also included certain reform features, and it was doubtless hoped that some of the reform activities would also be of some assistance in promoting recovery from the depression.

trols were essential to the successful prosecution of the war and whether certain controls were well suited to the objectives which were being pursued, the wartime functions and expenditures of the federal government were in general accepted with good grace by the people as being more or less inevitable in such an emergency period.

Proposed Governmental Functions. During the war period many people in this country apparently came to the conclusion that, while some controls over economic activity imposed by the federal government in wartime should be relaxed in the post-war period, the federal government must continue to assume responsibility for the successful operation of the economy as a whole. Governmental functions proposed in this connection included the guaranty or underwriting of full employment by the government; the provision of a system of social security, popularly known as the "cradle-to-grave" variety, to cover many more people, provide against more risks, and furnish much larger benefits than the present system; the provision of high minimum wages or even a national minimum per capita income; and support for a high wage policy in general in order to maintain purchasing power and the total demand for goods. Such functions, as we shall see later, might have serious implications for the future of our economic system.

PROPER ACTIVITIES OF GOVERNMENT

Our discussion has shown us that, except for allowances that must be made for such factors as changes in general prices, and extravagance and graft, the size of public expenditures depends upon the number and cost of the services which the various governmental units are called upon to render. Hence, in connection with the study of public expenditures, it is important to inquire how many functions should be assigned to the government. Since many of the functions now performed collectively could be carried on at least moderately well by other means, the answer which one person would give to this question might differ widely from that of another. There are some few individuals even today who believe that the ideal condition of society demands a complete absence of government. Others believe that government is a necessity but that its duties should be kept to a minimum, while still others would have all industries owned and controlled by the government—that is, by the people collectively rather than individually. Everyone would then work for the government; and it might be found wise, according to this opinion, to extend collectivism so far as to include the collective use of the products of economic processes.

A Test for Governmental Functions and Expenditures. There is clearly no necessary end or limit to the activities or functions of government. These activities might be reduced greatly from their present status, or they might be expanded until the government controlled all economic

activity. Hence, we greatly need a test which can be applied in deciding whether a given function involving a considerable expenditure should be assigned to a governmental unit or left in private hands. We may get some notion of the nature of such a test by giving thought to the purpose for which governments exist. Functions are given over to governments to perform, with the idea that services will in this way be rendered more efficiently and cheaply than they could be provided by each individual for himself. Thus it may be said that a function should be delegated to the government only when it appears that, bearing in mind the necessary costs of administration in collecting and disbursing the funds, together with whatever knowledge may be available as to the efficiency of the government in question, the expenditure of a given sum collectively will result in a more adequate and economical service than could be obtained by a similar sum privately spent.

A decision as to the aggregate amount to be collected and spent by governments in rendering the various services may be reached by having recourse to the familiar economic terms "satisfaction" and "productivity." Individuals spend their incomes for consumers' goods, usually after a consideration of the different amounts of satisfaction that are likely to be derived from the various alternative uses to which the funds in question might be put, or for producers' goods after a similar decision has been reached with regard to productivity. In other words, individuals tend to spend their incomes in such ways as will likely, all things considered, result in the realization of the greatest possible amount of satisfaction, or productivity, as the case may be. Applied to public expenditures, the principle as commonly stated is that additional funds should be collected and spent by the government just so long as the amount of satisfaction to be derived in the aggregate from the new services rendered is in excess of the amount lost in the aggregate by having to give over the funds in question to the government.

This principle should be modified to allow for the fact that a direct comparison of satisfactions is not always the one to be made. Funds may be spent and hence have to be collected in such amounts and such ways as will indirectly have the rather serious effect of restraining or depressing business. For this reason the principle should be stated as follows: A government should collect and spend such an aggregate sum that the advantage in the form of satisfaction to be gained by any further collections and expenditures will not be sufficient to offset the disadvantage of loss of satisfaction, either direct, or indirect through the ill effects on business, by reason of turning the funds in question over to the government. Furthermore, just as an individual attempts to distribute his income among the various objects of expenditure in such a way as to make the last dollar spent for each purpose afford him as much satisfaction as could be derived from a like expenditure for any other object, so too it

might be desirable to have the aggregate amount of expenditure of the government split up among the several governmental activities in such manner that no money will be spent for one purpose which would result in greater satisfaction if it were added to the sum to be spent for some other purpose.

Difficulties in the Use of This Test. It must be admitted that this test for public expenditures has its disadvantages. It has often been said that satisfaction is a matter which each individual must decide for himself, and which as a consequence cannot be accurately measured by some individuals for others. And yet, in applying this test for governmental activities and expenditures, it will be necessary for us constantly to form an opinion as to whether the satisfaction to be gained from a

or damage to business which may result because funds are collected in order to make it possible to carry on these functions.

The Need for Expenditures for Protection. However, there is *ordinarily* more doubt whether a similar conclusion can be reached with regard to what is usually the principal activity of the national government—the provision of protection in one form or another. Expenditures for this purpose, as has been mentioned, make up a very large part of the total expenditures of our national government, and consist in the main of payment for past wars and preparation for those of the future. Without attempting to ascertain whether the wars of the past were necessary or the extent to which maladministration may have added to the costs of these conflicts, we may note that there is a conviction on the part of many persons that, *under ordinary circumstances and from the strictly economic point of view*, war is an unwise and costly method of “settling” disputes between nations. Modern wars almost inevitably bring economic losses, and not economic gains, to all the participating nations.

If the test of satisfaction is applied to this type of expenditure, there seems to be only one way in which the test may be stretched sufficiently to make it cover the activity. If the conditions of the world today are regarded as fixed, unyielding conditions to which we may react but which we cannot change, then preparation for war, and at times the actual waging of war, may be necessary. We do not want aggressor nations to be in a position to take our land and resources from us, or to destroy our institutions. To prevent such heavy losses, it may be worth while for us to bear the burdens involved in preparing for and waging war. Thus, war may be the lesser of two great evils, even if it results in severe economic losses. On the other hand, from the point of view of the world as a whole the billions of dollars spent for wars and armaments in the past and present have been and are economic waste. There would be a greater sum total of satisfaction from the use of economic goods if the world were freed from military conflict.

Depression Activities and Expenditures. What shall we say of the depression activities and expenditures of the federal government? From the point of view of a direct comparison of satisfactions, many of them would probably pass muster. Consider, for example, relief or work relief for the unemployed, which was the largest and probably the most severely criticized of the depression expenditures of the federal government. So far as governmental assistance was received by those who really needed it, it is hard to believe that these expenditures did not give more satisfaction to the recipients of the government's aid than they took away, or will take away, from the taxpayers. However great the pangs suffered by those who have paid or must pay taxes to cover relief expenditures, they are doubtless less painful than the pangs of death by starvation or exposure.

However, when we consider the indirect effects of the depression activi-

ties and expenditures, the answer is not so clear. The heavy expenditures had to be financed by either taxation or borrowing. To the extent that taxation was used, high taxes tended to cut into employment-creating private spending for consumption or investment as well as unnecessary saving. Moreover, some individuals in the higher tax brackets may have been rendered unwilling to put capital funds into risky ventures, since any gains which they might make would have to be shared with the government while any losses they might suffer would be almost entirely their own. To the extent that borrowing (deficit spending) was used to finance the governmental expenditures, business confidence may have been affected and fears of later higher taxes aroused, with adverse effects on the amount of production and employment furnished by private industries and businesses.

Funds for relief or work relief may have been used in some cases for political purposes rather than to promote recovery from the depression, and the receipt of governmental assistance probably weakened the morale of some persons and made them anxious to make a "career" of the W.P.A. or to "retire" on relief, rather than to shift for themselves in private employment. The laws of 1933 and 1934 may have cleansed and purified the issuance of securities and the operation of the security exchanges, but, according to some authorities, they also brought the issuance of new corporate securities almost to a standstill and greatly weakened the functioning of the security exchanges. Though the activities in behalf of labor greatly improved the bargaining power of employed workers, they may have made enterprisers less willing than they would otherwise have been to undertake production and furnish employment. Direct competition with private business by governmental enterprises or agencies, or even the threat of such competition, and the general attitude of hostility toward private industry and business on the part of the federal government, may have had similarly detrimental effects.

Other examples could be given, but those presented above may be adequate to suggest that the assumption by the government that the capitalistic system could not handle the situation may have led to governmental activities which increased the probability that capitalism would be unable to operate successfully. It is impossible to know whether our economic system as a whole was actually better off by (say) 1940 than it would have been if the federal government had not assumed responsibility for its operation and for the promotion of recovery in 1933. However, it is clear that the degree of recovery from depression which was effected under governmental control was disappointing, and that the recovery was far from complete at the outbreak of the World War II.

Proposed Governmental Activities and Expenditures. In evaluating governmental activities and expenditures which are proposed for the post-war period, such as the guaranty of full employment, the provision of

cradle-to-grave social security, and the underwriting of high minimum wages or minimum per capita incomes, it is not enough merely to compare the gain in satisfactions by the beneficiaries of these policies with the loss of satisfaction suffered by the taxpayers. As in the consideration of depression activities and expenditures, we must consider the effects on private businesses and industries, and on the economy as a whole. If, as some people think, an enthusiastic pursuit of the policies in question should make it impossible for our economic system to operate in capitalistic fashion and transform it into some form of controlled and planned economy, we might experience several unpleasant changes. Such changes would conceivably include the loss of economic freedom which would probably be surrendered in a planned and controlled economy, the possible loss of political freedom, the difficulties which might arise because of a lack of adequate incentives in the planned economy, and other matters which will be discussed in the chapters on collectivism in the latter part of the present volume.

The danger that expanding governmental activities and expenditures might lead us in the direction of a planned and controlled economy is far from negligible. The public debt of the federal government amounted to about 260 billion dollars at the end of 1947. Interest on this debt at 2 per cent would amount to about 5 billion dollars per year, and this would be merely the cost of carrying the debt. If any serious attempt were made to pay off the debt gradually, further large expenditures would be necessary. If the debt were not to be reduced in this fashion, it would have to be refinanced sooner or later and probably at higher rates of interest, which would have much the same effect on federal expenditures. Some persons who are relatively unconcerned about the size of the national debt seem to think that there is a limitless market for government bonds in this country at an interest rate of about 2 per cent; but we may doubt that this would be the case in peacetime and in a free market.

According to most pronouncements on the subject, our military and naval establishments, and the armed forces in general, will have to be maintained at a high level for some years to come, to protect us from unknown or unmentionable dangers and to enable us to play our part in international organizations for keeping the peace. The cost will surely run into several billions of dollars annually. We shall have other large expenditures for pensions, hospitalization, medical care, education, training, rehabilitation, and other projects undertaken for the benefit of veterans of World War II. Then we must add some billions of dollars for the operation of ordinary departments of government, others for an enlarged program of social security, and possibly still others for a federal guaranty of employment if full employment does not come about naturally. Some estimates of governmental expenditures for maintaining employment are as high as 10 or 15 billion dollars in some years—or even year

after year if there should be a chronic shortage of private spending for consumption and investment.

Just how large the annual expenditures of the federal government would be on the basis of these projects, and others which have been proposed, is uncertain, but most estimates call for federal expenditures far larger than those to which we have been accustomed in peacetime. Some persons are thinking in terms of only 18 or 20 billion dollars per year, but it is more likely that federal expenditures may run to 30, 35, or even 40 billions annually. Indeed, federal expenditures for the peacetime fiscal year 1947 amounted to more than 42½ billion dollars. Whatever the annual amount might be, the large expenditures of the federal government in the post-war period would have to be financed by means of taxation if we did not wish to add steadily to the already overgrown federal debt. This would call for the continuation of very high levels of taxation, possibly not far removed from those which prevailed during the latter years of World War II.

The point we have been trying to make is that our economic system probably could not operate in capitalistic fashion in peacetime if the government should find it necessary to take a very large part of the earnings or "profits" of business enterprises of all types through taxation, while leaving these same enterprises to bear unassisted the greater part of any losses which they might encounter. Moreover, such a situation would be most unfavorable for the expansion of the economy and the foundation of new enterprises on the basis of private capital. And this discussion of public finance ignores the important direct question of whether the government could maintain full employment, a high and controlled level of wages, and a complete system of social security in any case without assuming full control over the operation of the economic system as a whole.

PUBLIC BORROWING AND THE PUBLIC DEBT

The Growth of the Public Debt. The expenditures for carrying on governmental activities should ordinarily be made out of current revenues from taxation and other sources. In many years, however, all of our government units find it impossible to secure sufficient current revenue to meet their expenditures, and depend upon public borrowing to meet the deficit. Although the debts of state and local governments are also of significance, we shall center our attention upon the public debt of our federal government. This debt reached \$26,597,000,000 after World War I, but by 1930 it had been reduced to \$16,026,000,000.⁷ Since 1930, the federal government has had a large deficit every year and its debt has been mounting rapidly. It reached \$40,440,000,000 in 1939, after nine years of

⁷ Daily Statement of the United States Treasury, June 30, 1941.

deficit financing of depression activities. Then, with heavy national defense and war expenditures added to an already unbalanced budget, the debt grew rapidly to \$136,696,000,000 in 1943, \$201,003,000,000 in 1944, \$258,682,000,000 in 1945, and \$269,422,000,000 in 1946, as is shown in Table 51. The 1946 figure amounted to \$1925 per capita.

TABLE 51. EXPENDITURES, REVENUES, DEFICITS, AND PUBLIC DEBT
OF THE FEDERAL GOVERNMENT, FISCAL YEARS 1931-47

(Source: Board of Governors of the Federal Reserve System, *Banking and Monetary Statistics*, pp. 509, 510, 513; *Federal Reserve Bulletin*, September, 1946, pp. 1047-1949, and November, 1947, pp. 1401-1405)

Year	Expenditures (in millions)	Revenues (in millions)	Deficits (in millions)	Public Debt (in millions)
1931	\$ 3,652	\$ 3,190	\$ 462	\$ 16,801
1932	4,535	2,006	2,529	19,487
1933	3,864	2,080	1,784	22,610
1934	6,011	3,116	2,896	27,053
1935	7,010	3,800	3,210	28,701
1936	8,666	4,116	4,550	33,779
1937	8,177	5,029	3,148	36,425
1938	7,239	5,855	1,384	37,165
1939	8,707	5,165	3,542	40,440
1940	8,998	5,387	3,611	42,968
1941	12,711	7,607	5,104	48,961
1942	32,397	12,799	19,598	72,422
1943	78,179	22,282	55,897	136,696
1944	93,744	44,149	49,595	201,003
1945	100,405	46,457	53,948	258,682
1946	65,019	43,038	21,981	269,422
1947	42,505	43,259	754*	258,286

*Surplus.

Inflationary Dangers of Public Borrowing and an Increasing Public Debt. There can be no sound objection to governmental borrowing to meet an emergency, when revenues fall short. If a national emergency requires expenditures in excess of collectible revenues, the federal government would be foolish not to permit its budget to become unbalanced. When a man needs a surgical operation, he does not hesitate to call in the surgeon merely because the cost would unbalance his budget for that year. On the other hand, though the use of sulfa drugs may be indicated for pneumonia, they would scarcely prove beneficial as a steady diet. Continuing deficits of many billions of dollars per year may lead to the destruction of the government's credit. If the public debt grows so large that full payment of interest and repayment of principal become improbable, the government may eventually be unable to borrow from its people. If it is then unable or unwilling to decrease expenditures or increase ordinary revenues, it may resort to printing paper money with which to pay its bills. These inflationary tactics on the part of a government usually lead

to an economic breakdown from which a country may not completely recover for many years.

In World War II our federal government did not resort to printing paper money in order to pay its bills, but it did something not very different. Anxious to make total expenditures far in excess of the sums which it was thought possible or feasible to collect in taxes or obtain through direct sales of bonds to the people, the government resorted to sales of bonds to the banks in order to obtain the necessary funds. The banks paid for these bonds by creating demand deposits for the government to spend. In this way the government obtained large sums of purchasing power without reducing the funds available for civilian spending, and the total of government and civilian purchasing power became much larger than necessary to take off the market at stable prices all the commodities and services the economy could produce. The situation which was created was about as inflationary as though paper money had been printed to finance governmental expenditures, except that the people apparently are not driven into as great a panic by the creation of demand deposits as by the printing of paper money. A tremendous inflation of prices was avoided during the war period by resorting to direct price control, production control, rationing, and other devices, but these measures merely postponed the problem and did not eliminate it.

The Future Burden of the Public Debt. Another objection to our rapidly growing public debt runs to the effect that we shall be passing on to our children and grandchildren a staggering burden of debt which they will have to pay, to their own great detriment. This contention is difficult to evaluate. Clearly, in the sense of *real income*, future generations may not suffer from a large public debt incurred now. If the government borrows to buy wheat to feed its starving people, the wheat is taken not from the crops of thirty or fifty years hence, but from present supplies. If the government uses borrowed funds to induce farmers to plow cotton under, current crops (and not those which our children will harvest) are reduced. When the government spends billions of borrowed dollars for war goods, it causes a shortage of consumers' goods here and now, rather than in the more or less indefinite future.

What really happens when a government borrows directly from its people is that they are induced to turn over to it a part of their current money income. With these funds, the government is able to secure a larger share of our *present national real income* than it could otherwise obtain, and private individuals must get along with a smaller share than they would otherwise have. In the sense of real income, then, the cost of public borrowing is borne now in the form of a smaller real income for private purposes than would otherwise be available. And the effect may be much the same when the government borrows from the banks,

instead of directly from the people, provided ways can be found to sterilize part of the large money incomes which remain in the hands of private individuals.

From the *financial* point of view, it is certainly true that the government will have to collect taxes in the future in order to pay interest on its obligations, and possibly to pay part of the principal, but at the same time these amounts will be paid to the owners of the government bonds which represent our public debt. If the people who own the bonds also pay the taxes, even private individuals may "break even" on the process. But whether certain *individuals* gain, lose, or break even, it is clear that the *nation as a whole*, in paying off the public debt, merely transfers money from one pocket to another so long as the entire debt is held within the country. Such transfers, it is said, should not be very harmful.

On the basis of these and other arguments, some writers are inclined to scoff at the idea that our large public debt will give us trouble in the future. The size of the debt is a matter of small importance, since "we owe it to ourselves." While individual bondholders will need to be paid off from time to time, the principal sum of the debt as a whole will never have to be paid and our only concern should be the size of the interest payments in relation to our national income. Indeed, some writers consider it desirable to have a continually growing public debt, on the ground that large governmental expenditures in excess of current revenues will insure the existence annually of a total sum of purchasing power in the country large enough to take off the market all the commodities and services which the economy can produce at full employment. If we can keep the national income constantly growing in this way, even a total of interest payments which steadily increases in absolute size will not be a very severe burden.

In our opinion, however, a light-hearted attitude toward the future burden of the public debt is far from completely justified. When taxes are collected to pay interest on the debt or to repay principal, they may be so large in amount or be collected in such ways as to hamper and restrain production and employment and impair the effectiveness of our productive facilities. Indeed, these taxes may contribute significantly to a total burden of taxation which is so heavy that our economic system cannot support it and still operate in capitalistic fashion. Increases in the total of fixed income payments in the economy, such as interest payments on government bonds, tend to concentrate the risks of the system on those relatively few incomes which are drawn from the operation of business enterprises and the investment of venture capital. It has been estimated that the annual interest on a federal debt of \$300,000,000,000 would exceed the total of interest on private debts plus rents in a full-employment national income, and would equal one-fourth of the total business

7. "A part of the increase in public expenditures in the United States in the twentieth century has been nominal, rather than real." What is the significance of this statement?
8. How does inefficiency in the appropriation and administration of public funds affect the total of public expenditures?
9. What is meant by "the popular attitude toward public money"?
10. How have economic and social changes been responsible for a part of the increase in governmental functions and expenditures?
11. What has been the influence of the growing spirit of humanitarianism upon governmental functions and expenditures? Why?
12. How did the great depression following 1929 affect governmental functions and expenditures? Explain.
13. Comment on the functions performed by the federal government during World War II, and those which have been proposed for the post-war period.
14. How can we reach a decision as to whether given individual functions should be performed by government? As to the appropriate total of governmental activities and expenditures?
15. In the light of the proposed test for public expenditures, how would you criticize the major items of expenditure of the various governmental units in this country in the past?
16. If, as some writers suggest, it is no less incorrect *economically* to speak of "winning a war" than to talk about "winning an earthquake," why is it that we spend so large a part of our national income for submarines, battle-ships, and bombing planes?
17. Comment on the necessity for the principal depression expenditures of our national government during the 1930's, in the light of the suggested test for public expenditures.
18. Evaluate the activities and expenditures which are proposed for the federal government in the post-war period.
19. "It is important to consider the indirect as well as the direct effects of governmental activities and expenditures." Explain.
20. Describe the growth of the public debt in recent years.
21. "There can be no sound objection to financing governmental expenditures through public borrowing." Discuss.
22. How may heavy public borrowing lead to inflation? Explain.
23. Is it true that the public debt of the federal government is certain to be burdensome in the future because "we owe it to ourselves"? Explain.
24. To what extent is it true that the burden of the public debt cannot be transferred to the citizens of future years? Explain.
25. "A light-hearted attitude toward the future burden of our large public debt is far from completely justified." Explain.
26. Why is there need for a changed public attitude toward public functions and expenditures?
27. How should we seek efficiency in the conduct of government?

REFERENCES FOR FURTHER READING

See list of references at the end of Chapter 44.

Taxation

ONCE IT HAS BEEN DECIDED WHAT FUNCTIONS SHALL BE PERFORMED BY governmental agencies, there remains the task of determining the method or methods of procuring the funds from which the proposed public expenditures may be made. At times the national governments have deemed it wise to manufacture their own purchasing power. In other words, they have printed large issues of inconvertible or "fiat" money which they have used in paying for the governmental functions. The effect of this additional purchasing power, competing with the money already in circulation for the existing supplies of commodities and services, has been to deprive the individual citizens of a part of their purchasing power just as effectively as if the governments had exacted tribute from these citizens in the first place.

As we noted in the preceding chapter, governments have commonly borrowed to obtain funds for public expenditures. This method has been used whenever it has appeared undesirable or impossible to obtain sufficient funds for current expenditures from current sources of revenue. By borrowing, we get government services in the present and pay for them on the installment plan over a long period of years. Occasionally certain units of government secure small amounts of revenue from the conduct of various public service enterprises, but this is not ordinarily an important source of public income.

The Nature of Taxation. The most important source of the funds from which public expenditures are made has been and will doubtless continue to be taxation. A tax is "a compulsory contribution from the person to the government to defray the expenses incurred in the common interest of all, without reference to special benefits conferred."¹ In connection with this definition several observations should be made. First, a tax is a compulsory contribution in that the amount to be paid is decided by the government, as are also the time and methods of payment, without regard for the wishes of the individual taxpayer. In the second place, there is in taxation no definite *quid pro quo*; that is, the taxpayers are required to contribute to the support of the government on some basis other than the amount of benefit or service directly re-

¹E. R. A. Seligman, *Essays in Taxation*, New York, The Macmillan Company, 9th ed., 1921, p. 432.

ceived by them from the government. It often happens that the persons called upon to pay the largest taxes are those who are least dependent on governmental services and who could best provide for themselves if the services in question were not performed by the government. Finally, the purpose of a tax is to provide revenue for carrying on various functions in the interest of the public. In this connection a serious question often arises as to whether a tax may properly be made the instrument for the accomplishment of some ulterior purpose, such as the reduction of existing inequalities of wealth and income.

The Problem of Taxation. Since all governmental units of the present day find it imperative to obtain the greater portion of their revenues from taxation, the problem of taxation becomes one of securing these necessary revenues in such manner as will, among other things, involve the smallest possible expense in collection and administration, interfere as little as possible with the conduct of business and economic progress, and distribute the burden of supporting the government in as equitable a manner as possible.

GENERAL PRINCIPLES OF TAXATION

Fiscal Adequacy. Since the purpose of taxation is to provide large amounts of revenue for the different units of government, the first and most important test of a tax system is whether it will furnish sufficient revenue. The satisfaction of this test alone does not insure a perfect system of taxation, for many other important considerations must be borne in mind; but the inability to meet this test is of itself quite enough to make a tax system a failure. It matters little how convenient, economical, or simple the system is, or how well it succeeds in distributing the tax burden according to the high principles of equity and justice, if it does not provide the necessary revenue for the performance of the functions of government. Indeed, in times of great emergency—such, for example, as when a war is being waged—other factors are disregarded and the sole consideration of the government in passing upon tax rates and methods becomes that of fiscal adequacy.

Economy. As has been said, a tax system is set up in order to obtain a certain amount of revenue which is necessary for the performance of governmental functions. A sum must be collected from the taxpayers, however, which is larger than the amount to be spent by the government in question, in order to cover the costs of collecting and administering the taxes. Other things being equal, taxes which involve the collection of large increments of revenue, with a minimum of complaints and book-keeping details to be handled, are preferable to those which necessitate the collection of a multitude of small sums and involve great complexity of administrative machinery. In the words of Adam Smith, "Every tax

ought to be so contrived as both to take out and to keep out of the pockets of the people as little as possible over and above what it brings into the public treasury of the state."

However, in connection with the test of economy, as well as with that of fiscal adequacy, the effects of taxation on the taxpayer and upon business in general must be considered. No tax is fiscally adequate, however great the revenue which it produces, and no tax is economical, however small its cost of collection and administration, if it is levied in such fashion or to such extent as to discourage business activity, curb individual initiative, or check unduly the accumulation of capital. It would be possible to devise a very simple system of taxation, the burden of which would rest entirely upon large incomes and large accumulations of wealth; but while this system might be a marvel of adequacy and economy for a time, its long-run results might easily be disastrous because of its effects on capital accumulation and business initiative. Almost everyone admits the validity of this principle, but there are great differences of opinion as to the exact point at which these undesirable effects would show themselves if higher and yet higher taxes were assessed on large incomes and great stores of wealth.

Simplicity, Certainty, and Convenience. Simplicity is another desirable feature of a tax system. The provisions of our tax laws should not be complicated, but should be so worded that they may readily be understood by those who must pay the taxes as well as those who administer the tax laws. It is scarcely likely that any system of taxation could be set up which would be understood in all its ramifications by all the taxpayers and officials concerned, but it is certain that our present laws leave room for a large measure of progress in the direction of simplification.

A sound tax system will also be characterized by certainty. It is probable that our economic system could in the long run become adjusted to either a high or a low level of taxation with something like equal success, but uncertainty seems ever to be productive of undesirable results. Witness, for example, the effect of uncertainty as to the provisions of an impending tariff bill upon business activity in the United States! Uncertainty in taxation also provides many opportunities for chicanery and corruption in the assessment and collection of taxes.

Taxes should be collected at such times and in such a manner as will be most convenient for the taxpayers. It is not possible, of course, to have all taxes marked by convenience of payment, but we retain some taxes, such as those on commodities, which are very convenient to pay though they fall far short of perfection with regard to some of our other tests. In general, convenience of payment is a desirable quality whenever it can be obtained.

Elasticity. Writers on the subject of money and banking are in general agreement that one of the principal defects of our money and credit

system prior to 1913 was its inelasticity. The quantity of money and credit could not be enlarged sufficiently to meet the emergency needs of business, and recurrent periods of monetary stringency and even financial panics resulted. Inelasticity is a serious defect in a system of taxation also, for it means that the revenue received from the taxes in operation cannot be expanded to meet the larger needs which may be experienced from time to time. Consequently, if the tax system lacks elasticity, there are likely to be frequent deficits and a dependence on borrowing to secure the funds with which to meet current obligations.

Equity. A final requisite for a sound tax system is that it shall be equitable. Once it is ascertained that a given system of taxation is likely to provide an adequate amount of revenue, the next most important consideration is to have the tax burden distributed among the taxpayers in an equitable manner. This consideration becomes increasingly significant as the size of the aggregate volume of taxation increases. Years ago, when public expenditures were relatively slight and the total burden of taxation was not heavy, almost any system was likely to be reasonably fair. This would not be true at the present time. In view of the importance of the principle of equity, it will be well to inquire further into its meaning as applied to a system of taxation.

The Benefit Theory of Taxation. Many persons have held in the past that a tax should not be defined as we have defined it, but should be considered a payment to the government because of, and in proportion to, benefits received from it. Thus a person who benefited greatly at the hands of the government would be expected to pay a large sum in taxes, while one who derived but slight satisfaction from services rendered by it would not be asked to give any considerable portion of his income to its support. However, though the benefit principle seems very just in theory, it has been largely abandoned because of the apparent impossibility of applying it in practice. In the first place, it is not possible to determine exactly how much benefit each citizen receives from the government. Here we are dealing with the matter of individual satisfactions, which cannot be accurately appraised except by each for himself. In the second place, even if benefits could be correctly estimated, we might find that the persons receiving the largest benefits from the services rendered by the different governmental units were the very ones who were least able to spare any great amount in taxes to pay the costs of such services. On the other hand, as we have already said, those with very large means might well be able to provide for themselves many services now rendered by the various governmental units. Thus they would be less dependent than the poor upon these services, and could not be called upon to make any large contributions to the government on the basis of the benefit principle.

The Principle of Ability to Pay. Most economists and writers on public finance at the present time have gone over to the principle of ability to pay, which holds that each individual should be taxed, for

the most part, according to his ability to make contributions to the support of the state, without regard to the amount of benefit he may derive from the activities of the government. This principle seems on the surface to be admirably simple, but its interpretation is extremely difficult. What, for example, shall be the test of ability to pay? The answer to this question used to be that the possession of property was a clear indication of ability to pay taxes, and it was decided that any man who was fortunate enough to own great quantities of wealth should be required to contribute large amounts to the governmental treasuries. As time went on, economists came to suspect that some modification of this answer was necessary, for many individuals were receiving large incomes annually but were escaping the tax-gatherer altogether under the prevailing system of general property taxes.

Income as an Indicator of Ability to Pay Taxes. It may be said that today the greatest emphasis is placed upon income as a test of ability to pay, although property is by no means completely disregarded in this connection. This does not mean, however, that it is necessary merely to discover the amount of a person's income in order to pass judgment on his ability to pay taxes. Many other matters must be borne in mind, such as whether the income in question is "earned" or is derived from investments, whether it contains any elements such as the return on diminishing assets, whether it represents any surplus over and above the returns necessary to induce the individual to continue to perform his services or lend his capital, and, finally, the length of time over which the income is received.

Proportion vs. Progression. Probably the most important question in connection with the principle of ability to pay relates to the way this ability increases as income increases. In other words, as a man's net taxable income increases, does his ability to pay taxes increase exactly in proportion to this increase, or more or less slowly? If A has a net taxable income of \$10,000, while that of B is \$5000, is A able to pay exactly twice as much in taxes as B, more than twice as much, or less than twice as much, supposing the considerations mentioned in the preceding paragraph to be the same for both individuals? These are questions that can be answered only after a further examination of the meaning of the principle of ability to pay. If we decide that A's ability to pay is exactly twice as great as B's, then taxation should be proportional—that is, the same rate should apply to both individuals—and at this rate A's contribution will be double that of B. If A has less than twice the ability of B to pay taxes, the rates of taxation should be regressive, that is, a lower rate should apply to the larger income than to the smaller. Finally, if A's ability to pay taxes is more than double that of B, the rates of taxation should be progressive, that is, the greater the income the higher the rate of taxation which is applicable to it.

The advocates of progressive taxation base their arguments in large

measure on the theory that the satisfaction to be derived from the expenditure of a unit of money income diminishes as the total income of the spender increases. A certain amount of income is necessary as a minimum for subsistence, and does not represent ability to pay in the true sense of the term. The first increments of income above this minimum amount are used by the individual to satisfy urgent wants, while further and yet further additions to income will be used to satisfy less and still less important wants. It follows that, unless we are dealing with individuals who choose to satisfy their less pressing desires before attending to those which are more urgent, diminishing satisfaction is experienced in the expenditure of successive increments of income. Thus, it is held that the man with an income of a million dollars a year is not losing nearly so much satisfaction when compelled to give up one hundred thousand dollars in taxes as is the man with ten thousand a year when he contributes a thousand dollars to the support of the government, although it is clear that the rate is the same in these two instances. It may seem equitable, then, for the recipients of large net taxable incomes to pay taxes at higher rates than those applied to men receiving smaller incomes, which means, of course, the use of progressive rates of taxation.

Since there is no way to make accurate direct comparisons of utilities or satisfactions between different individuals, and since it is by no means certain that all individuals have equal capacities for experiencing satisfactions, it is impossible to *prove* that this analysis in support of progressive taxation is sound. However, most students of public finance are satisfied that progressive rates of taxation should be used wherever they can be successfully applied—which means for all practical purposes in the taxation of incomes and inheritances. It should be apparent that a progressive tax upon a commodity, say cigarettes, which would mean a high tax if the purchaser were rich and a low tax if he were poor, would not be practicable. Once it is decided that taxes should be progressive where possible, there remains the problem of deciding how progressive they should be, and here we must consider the indirect as well as the direct effects of taxation. That is to say, taxes might be made so highly progressive that they would discourage business activity, curb individual initiative, and check unduly the accumulation of capital.

The Incidence of Taxation. In deciding whether a particular tax system is equitable, it is of vital importance to know who ultimately bears the burden of the various taxes levied. It has long been customary to divide taxes into two classes, direct and indirect. *Direct taxes* are those which are collected at the outset from the persons upon whom it is intended that the burden shall fall, such as a tax on the rent of land. *Indirect taxes* are those collected from one group of individuals with the expectation that the burden will be shifted by them to a different group. The classification of taxes into direct and indirect groups has proved to be

unfortunate. In some cases, we find so-called direct taxes being passed on, in part at least, to others than those from whom the tax was originally collected, while at other times so-called indirect taxes have not been shifted, but have remained a burden upon those who paid them in the first place. Wholly apart from any classification, however, the problem of the "incidence," or ultimate burden, of taxation is extremely important.

The study of the shifting and incidence of taxation is a branch of the study of value. To know whether a tax on a given commodity is likely to be shifted, it is necessary to ascertain whether the conditions of production and sale for that commodity make it possible for its price to be raised so as to pass the amount of the tax on to the consumers, or for the tax burden to be passed backward to the suppliers of certain productive agents in the form of lower prices. If the tax in question is levied on some agent of production, such as land or capital, it is necessary to make a similar investigation into the conditions which determine the price of that agent of production, in order to discover whether the tax can or cannot be shifted.

TABLE 52. SOURCES OF FEDERAL REVENUE, FISCAL YEARS 1945 AND 1946

(Sources: *Federal Reserve Bulletin*, September, 1946, p. 1049. *The Economic Almanac for 1946-47*, pp. 290, 291.)

Source of Revenue	Amount Received in 1945 (in millions)	Per Cent of Total Revenue 1945	Amount Received in 1946 (in millions)	Per Cent of Total Revenue 1946
Personal income tax	\$19,034	39.9	\$18,705	42.3
Corporation income tax	4,880	10.2	4,640	10.5
Excess profits taxes	11,148	23.3	7,913	17.9
Capital stock tax	372	0.8	352	0.8
Payroll taxes	1,793	3.8	1,714	3.9
Estate and gift taxes	643	1.3	677	1.5
Excise taxes	5,945	12.5	6,684	15.1
Customs duties	355	0.7	435	1.0
Non-tax revenue	3,570	7.5	3,119	7.0
Total revenue	\$47,740	100.0	\$44,239	100.0
Total net revenue*	\$46,457		\$43,038	

* Total revenue less social security employment taxes, which are appropriated directly to the Federal old age and survivors insurance trust fund.

THE FEDERAL REVENUE SYSTEM

As may be seen in Table 52, the federal government had a total revenue of \$44,239,000,000 in the fiscal year 1946, and a total net revenue of \$43,038,000,000. Comparable figures for 1945 were \$47,740,000,000 and \$46,457,000,000. Of the total revenue in 1946, the personal income tax

yielded 42.3 per cent; all corporation taxes, 29.2 per cent; payroll taxes, 3.9 per cent; estate and gift taxes, 1.5 per cent; excise taxes, 15.1 per cent; customs duties, 1.0 per cent; and non-tax sources, 7.0 per cent. These figures may be compared with those for 1945, when the personal income tax yielded 39.9 per cent; corporation taxes, 34.3 per cent; payroll taxes, 3.8 per cent; estate and gift taxes, 1.3 per cent; excise taxes, 12.5 per cent; customs duties, 0.7 of 1 per cent; and non-tax sources, 7.5 per cent. (The total net revenue of the federal government in the fiscal year 1947 amounted to \$43,259,000,000, including \$19,343,000,000 from individual income taxes, \$9,676,000,000 from corporation taxes, \$779,000,000 from estate and gift taxes, and \$7,285,000,000 from excise taxes.) We shall now turn to an examination of these several types of taxes.

The Personal Income Tax. The taxation of personal incomes was the most important source of federal revenue in 1946. In applying the tax, after the deduction from gross income of the necessary expenses of acquiring it and a number of other allowable deductions, the individual taxpayer was allowed an exemption of \$500 for himself and \$500 for each dependent. The rest of the taxpayer's income was subject to a normal tax of 3 per cent, and to surtaxes beginning at 17 per cent on the first \$2000 of eligible income and running up to 88 per cent on all such income in excess of \$200,000. However, the taxpayer's actual tax liability was limited to 95 per cent of his total tax as computed on this basis, and to 85.5 per cent of his net income.

In 1946, normal taxes and surtaxes on wages and salaries of \$5000 or less were being withheld by employers and paid directly to the government. Individuals with incomes of more than \$5000 from wages and salaries, or with incomes of more than \$100 from other sources (providing the total income was at least \$500), had to file an estimate, by March 15, of their total tax liability, the amount of tax which would be withheld from them, and their net tax liability to the government. One-fourth of the latter sum had to be paid at once, and the remainder in three installments on June 15 and September 15, 1946, and January 15, 1947. Then, by March 15, 1947, all payers of the personal income tax had to file a final return, adjusting their actual tax liability to the payments which had been made during the year by withholding or otherwise.

Merits of the Personal Income Tax. The personal income tax is generally considered to be a good tax. It falls directly on income, from which all taxes must come eventually, if sometimes indirectly; and income is the most widely accepted indicator of ability to pay. The tax usually yields a large revenue but, being based on realized income, the receipts are likely to decline sharply in times of business depression when the government needs especially large revenues. The tax lends itself readily to progressive rates, which are usually thought necessary to the application of the principle of ability to pay. It is certain as to time and manner

of payment, but is only moderately satisfactory from the point of view of economy in collection. Finally, because of the progressive rates of the personal income tax, the collection of a given amount of revenue by means of this tax tends to inhibit consumption expenditures to a lesser extent than would the collection of the same amount of revenue by means of excise or payroll taxes, which bear directly on income destined for consumption.

Defects of the Personal Income Tax. Although repeated attempts have been made to simplify income tax procedure for the small taxpayers, the personal income tax law remains complicated, and a person of considerable income often needs legal advice in arriving at the amount of tax he must pay. Except for the withholding of the tax on wages or salaries of \$5000 or less, the method of assessment is by the taxpayer's declaration of his income, expenses, and deductions, supplemented by information (furnished by employers and others who make the payments) as to amounts paid in salary, interest, or other types of income. This method of assessment requires a high degree of administrative efficiency if the tax is not to be merely a tax on honesty and to lead to widespread evasion.

It is difficult to define income for purposes of taxation, and our laws do little more in this respect than to enumerate various taxable and non-taxable items. Under the law, as now interpreted, some peculiar situations arise. For example, a farmer need not count as taxable income the food and shelter provided by his farm, but no similar privilege is accorded those who must buy their food and shelter with money income. A house owner who occupies his house need not count as taxable income the shelter he enjoys, but if he rents the house to another the rental that he receives is taxable. If a man is buying a house through payments over a long period of time, the interest that he pays on his indebtedness is deductible from income for tax purposes, but he has no such deduction if he buys the house outright for cash. If the individual owns a corporate bond, the interest received is subject to the income tax, but the same thing is not true if he owns a "tax-exempt" bond issued by some governmental unit in the past.

Another difficulty in connection with the personal income tax is found in the treatment of capital gains derived from the sale or exchange of assets. If a taxpayer's surtax net income is less than \$18,000, net long-term capital gains must be included in ordinary income, and will be subject to a combined normal tax and surtax of from 20 to 50 per cent (under the law in effect in 1946). However, since only 50 per cent of long-term capital gains need be counted as income, the *effective* rate of taxation for these gains is from 10 to 25 per cent. If the taxpayer's surtax net income is \$18,000 or more, he is allowed to pay a flat tax of 50 per cent on the net long-term capital gain reported, but the amount reported as income is only 50 per cent of the actual gain, so that the effective rate of

taxation is 25 per cent. Thus, long-term capital gains are never subject to an effective rate of taxation higher than 25 per cent, and the rate may be substantially lower.

This preferential treatment of capital gains interferes considerably with the progressiveness of the personal income tax, for capital gains are likely to constitute a larger part of the total income in the higher than in the lower surtax brackets. Moreover, it is sometimes possible to convert other types of income into capital gains in order to avoid paying high surtax rates. If, for example, one is selling, at a profit, a capital asset that is to be paid for on the installment plan, with interest to be paid by the buyer, it may be better to add the total amount of the interest to the price of the asset (so that it will appear as a capital gain) than to have interest as such paid with each installment of the principal. The reason is, of course, that interest as such is subject to the full normal tax and surtax, whereas the effective rate of taxation applicable to long-term capital gains cannot exceed 25 per cent. Finally, the preferential treatment of capital gains applies to gains from purely financial speculation and other sources, as well as to those which often form an important part of the profits from new ventures in business or industry.

The most serious defect of the personal income tax, under the present highly progressive rates, is its effect in discouraging enterprise and personal initiative. In combination with taxes on corporate income, it imposes heavy double taxation on income derived from corporate ownership. By itself, it discourages self-employment by individuals and the founding of unincorporated enterprises. The income from business ownership is always uncertain, and this is especially true of the income from new ventures; yet the personal income tax takes a considerable part of any net income received, and it permits only a relatively meager offset for losses. The tax is especially restrictive for individuals who already have large incomes. Why should the movie star undertake another picture this year if all the additional income derived from it will be subject to an 88 per cent tax, and why should the well-to-do individual undertake a new and risky business venture under the same circumstances?

The Incidence of the Personal Income Tax. The usual conclusion with regard to the incidence of the personal income tax is that its burden remains on those who pay it and that it cannot be shifted. It is argued that there is nothing about the income tax that enables individuals or companies to raise the prices of the goods they are selling, or makes the personal services or the capital furnished by individuals command a higher return. Consequently, it is said, all efforts to pass personal income taxes on to others are doomed to failure. This is undoubtedly a sound conclusion so far as the individual taxpayer is concerned. However, in the long run, if enough people were discouraged from undertaking business ventures or entering high-paying occupations, those who still

did these things might obtain large enough incomes so that, after paying the tax, they would have as much income left as they would have had in a previous situation in which the tax had not yet been imposed.

Taxes on Corporations. The corporation income tax produced 10.5 per cent of the total federal revenues in 1946. The normal tax rate was 24 per cent for corporations with net incomes in excess of \$25,000, and 15 to 19 per cent for corporations with smaller net incomes.² The surtax was 14 per cent for corporations with net incomes in excess of \$50,000. Corporations with net incomes between \$25,000 and \$50,000 paid 6 per cent surtax on the first \$25,000 and 22 per cent on the balance, and corporations with a net income of less than \$25,000 paid a straight 6 per cent surtax.

Excess profits taxes produced 17.9 per cent of the total federal revenues in 1946. Most of this revenue was yielded by the excess profits tax applied in 1940 (sometimes called the "main" excess profits tax to distinguish it from the "declared value" excess profits tax). For the purposes of this tax, each corporation received a flat exemption of \$10,000, plus a further credit computed by either of two methods—net income or invested capital. By the net income method, the credit amounted to 95 per cent of the average net income of the corporation in the period 1936–39, plus 8 per cent of net capital additions or minus 6 per cent of net capital reductions. By the invested capital method, the credit was 8 per cent of invested capital up to 5 million dollars and 7 per cent of invested capital over 5 million dollars. After the deduction of the exemption and the credit, each corporation (unless specifically exempted by law) paid the excess profits tax on the remainder of its income at the rate of 95 per cent, subject to a refund of 10 per cent of the tax later on. The main excess profits tax was repealed by the Revenue Act of 1945, effective January 1, 1946, but continued to yield revenue in the *fiscal year* 1946.

In addition to the corporation taxes already described, the capital stock tax and declared value excess profits tax produced small amounts of revenue in 1946. These taxes had been paired as complementary taxes since 1933. The rate of the capital stock tax was \$1.25 per \$1000 of the declared value of each corporation's capital stock. Having declared a total value for its capital stock, a corporation could earn 10 per cent on this value without paying any declared value excess profits tax. However, it had to pay 6.6 per cent on net earnings of 10 to 15 per cent, and 13.2 per cent on net income in excess of 15 per cent, of the total declared value of its capital stock. The capital stock and declared value excess profits taxes yielded some income in the fiscal year 1946, but were repealed by the Revenue Act of 1945, effective January 1, 1946. Under these various taxes on corporations, as described, it would seem that a corporation

² Excess profits taxes were deductible in determining income subject to the normal tax.

might have had to pay more than 100 per cent of its net income in taxes to the federal government, but such disasters were forestalled by a general proviso that all corporate taxes together must not take over 80 per cent of any corporation's net income.

Evaluation of Taxes on Corporate Income. The corporation income tax has usually been a good revenue producer although, like the personal income tax, its yield diminishes greatly in poor business years. This tax is not open to some of the objections urged against the personal income tax, though in the case of both it is difficult to decide what constitutes net income. Excess profits taxes also amount to very little in years when the level of economic activity is low or moderate, but they produce large amounts of revenue in prosperous years, and especially in wartime, when they are useful in preventing war profiteering. Excess profits taxes are often complicated, for it is very difficult to make them both fair and simple. They often give rise to extensive litigation and impose a severe test on the federal administrative machinery.

The various taxes on corporate incomes, considered together, are subject to certain criticisms, noteworthy among which is the suggestion that they do not conform to the principle of ability to pay. Many people contend that a corporation has no ability to pay taxes apart from the ability of its stockholders to pay. If this is true, we must note that the size of a corporation's net income has no necessary relationship to its stockholders' ability to pay taxes. One corporation with a moderate net income may distribute it in large amounts to its few (and possibly well-to-do) stockholders, while another with a huge net income may pay this income in small dribbles to its hundreds of thousands of small stockholders. In such a case, a small tax on the former corporation's income and a heavy tax on the latter's will not cause the respective stockholders to give up income in accordance with the principle of ability to pay.

It is also commonly held that taxes on corporate income, in combination with the personal income tax, lead to double taxation of the same income. When the corporation receives net income, it pays the corporation income taxes, and any other levies on corporate income which may be in effect at the time, and then pays dividends to the stockholders. The dividends then become personal income to the stockholders and are subject to both the normal personal income tax and the surtax, if the stockholders' incomes are sufficiently large. This is unquestionably double taxation and it penalizes severely the income drawn from corporate ownership as compared with other types of personal income. This criticism still applies, though with somewhat reduced force, now that the excess profits taxes have been abolished.

The Incidence of Taxes on Corporate Income. The above argument concerning double taxation assumes that taxes on corporate income cannot be shifted forward to consumers of corporate products or backward to

the owners of productive agents used by corporations, but remain as a burden on the corporation and its owners. This assumption is probably valid for most practical purposes, since the taxes in question fall on the net income realized from business operations in a given period and do not affect directly the marginal costs of the firms or give them any direct ability to raise prices. If any shifting of the tax occurred, it would be over long periods of time and in industries made up largely of corporations and not severely regulated by the government. The process would involve the lowering of the attractiveness of investments in corporate enterprises and reducing investment, with the result that surviving corporate firms could get higher prices and possibly as much net income as before the heavy taxes were applied. Any shifting that occurred in the long run would not, of course, alter the fact that double taxation had existed in the meantime.

Payroll Taxes. In 1946, payroll taxes produced 3.9 per cent of the total revenue of the federal government. These taxes are collected for the accumulation of reserves required under the Social Security and Railroad Retirement Acts. The taxes levied under the Social Security Act have been described in Chapters 25 and 26. Considering payroll taxes from the point of view of public finance, we suggest that those which fall on the employees operate as a crude sort of income tax, for all employees who come under the Act pay the same percentage of their wages. The taxes paid in the first instance by the employers will tend to be shifted to either the workers or the consumers, and will be regressive in operation. It would probably be better, from the point of view of equity, to support the various old age and unemployment projects out of general revenues, but the tax-consciousness promoted by payroll taxes may be desirable.

Estate and Gift Taxes. The combination of estate and gift taxes produced only 1.5 per cent of the total federal revenues in 1946. The estate tax is applied to estates as a whole rather than to shares received by individual heirs. The first \$60,000 of an estate is exempt, and the tax rates in 1945 ranged from 3 per cent on the parts of estates which barely exceeded the exemption, to 77 per cent on the parts of estates in excess of \$10,000,000. Credit was given against the federal estate tax for 80 per cent of any amount which was paid in taxes under state inheritance tax laws. The gift tax, which is necessary to prevent evasion of the estate tax through transfers of wealth between living individuals, had rates three-fourths as great as the estate tax rates.

The estate and gift taxes can be relied upon to produce a fair amount of revenue, but they are not a good source of increased revenue if the increase must be made available suddenly. The estate tax unquestionably accords with the principle of ability to pay. Inherited wealth is purely a surplus return to the heir, and is entirely unearned by him. The greater the amount that society permits to be passed on through inheritance, the

greater is the share which society may legitimately claim from an estate. The incidence of the tax is clear. Its burden rests wholly upon the receivers of the estate and cannot be shifted. The tax is certain as to amount, and as to time and manner of payment.

Objections to Estate Taxes. There are, however, at least two possible objections to the estate tax which the government should be careful to meet. In the first place, it is argued that, if the tax is too high, it will lessen the efficiency of business men and slow down the process of saving and capital formation. It is said that one of the strongest motives for working to acquire a large income, and for saving and accumulating a fortune, is the desire to provide adequately for one's dependents. If the inheritance tax is very high, some men might not seek to acquire large incomes, or might spend them for current enjoyment, and as a consequence the vital process of saving and capital formation would languish.

There is undoubtedly some truth in this contention. The desire to provide adequately for dependents is one reason why men work, save, and accumulate. However, there are many other motives operating in the same direction, such as the desire for luxurious living, the wish to provide for one's old age, and a yearning for prestige and power; so that capital formation probably would not cease even if inheritance were entirely eliminated. In any case, the present federal taxation of estates is not likely to have any detrimental effects upon our economic system, for \$60,000 may be passed on free of tax, and estates of even \$100,000 or \$200,000 are not greatly reduced by the tax. Indeed, some authorities on taxation urge that the estate tax rates should be increased and the exemptions lowered, with particularly high taxes applied to properties which were inherited twice or oftener. It is urged, also, that gift tax rates in the lower brackets should be raised, so that they will no longer provide so attractive a means of evading the higher rates of the estate tax.

Another objection to an estate tax is its inconvenience in payment. Many estates are left largely in the form of real estate, factories, machinery, and securities, and not in cash. Unless the heirs have other large sources of income, they may have to liquidate the inherited properties to pay the tax and, at a forced sale, might have to sell at a considerable loss. In this way, an heir might lose 40 or 50 per cent of the value of an estate on which the estate tax was only 25 per cent. This objection is taken care of, to some extent, by granting a reasonable period of time within which to pay the tax, and by providing for the revaluation of an estate if its value has declined between the date of death of the decedent and the date on which the tax must be paid.

Excise Taxes. In 1946, excise taxes of various kinds produced 15.1 per cent of the total revenues of the federal government. Excise taxes are taxes on economic goods. In some cases, producers are required to buy and affix stamps to the articles they make and sell. Again, the pro-

ducers may be required merely to pay the government a certain amount per unit of product produced and sold. Some of the taxes are specific, as for example a tax of (say) 5 cents per package of 20 cigarettes; others are ad valorem taxes, such as a tax of 10 per cent on the factory price of automobiles.

The Incidence of Excise Taxes. While excise taxes are usually collected from the producer in the first instance, their burden is borne in the end by the ultimate consumer when the taxed goods are made under competitive conditions. The tax is shifted through increases in the prices of the taxed articles, for excise taxes are costs of production to the producers of the goods and must be covered by price if production is to continue. However, the process of shifting is not the simple one of adding the taxes to the old prices. According to the Law of Demand, an attempt to raise the price of a taxed article will decrease the volume of sales. The extent to which an increased price will curb sales depends upon the elasticity or inelasticity of demand, but some decrease in sales is inevitable if the total demand for the good remains the same as before. A decreased volume of sales results in a decreased output of the good, and this change of output is likely to cause a change in the manufacturing costs of producing the good in the period of current production. Since the new manufacturing cost may be either higher or lower than before, depending upon whether the former output was greater than, equal to, or less than normal capacity, the price of the taxed article may increase by either more or less than the amount of the tax, in the process of shifting the tax to consumers. The effect upon price also depends to some extent upon whether the tax is specific or ad valorem.

Under conditions of monopoly, partial monopoly, or imperfect competition, the shifting of excise taxes is less certain than under competition. The monopolist or partial monopolist does not care who pays the excise taxes. His only concern is to set output and price at figures which will bring him the greatest possible total net revenue from the production and sale of his good. In some cases, his former output and price may have been so much more profitable than any other combination of output and price that he will be better off in terms of total net revenue to leave both unchanged and bear the tax himself, instead of attempting to shift it to consumers by raising price and reducing output. In other cases, a new combination of output and price would doubtless be more profitable than the old one, after the imposition of the tax, and as a consequence the monopolist would raise price and decrease output.

The Merits and Demerits of Excise Taxes. In general, the burden of taxes on commodities and other economic goods, no matter where it is first placed, tends finally to fall as a whole or in large part upon the consumers. Because of this fact, these taxes, judged by themselves, do great violence to our principle of ability to pay. They are not progressive, nor

are they even proportional to income. People with large incomes pay these taxes in greater absolute amounts than people with small incomes, but the percentage of total income spent for economic goods subject to excise taxes tends to decline as a person's total income increases. Therefore, these taxes take away a smaller *percentage* of a large than of a small income, and are regressive in operation. This does not mean that they should never be imposed, for their bad effects may be quite offset by other taxes in the system. Excise taxes have been good revenue producers in the past, and have been considered a rather elastic element in the tax system. Their convenience in collection and payment is well known, for they "get the feathers with a minimum of squawking." They are often included in the prices of articles in such a way that most consumers are unaware that they are paying them.

Customs Duties. Customs duties, or duties on imports, produced only one per cent of the total federal revenue in 1946. These taxes have lost importance rapidly, for at one time they produced almost all the revenue of the federal government. With the United States operating under a high protective tariff, revenue from import duties is largely incidental. The main purpose of the tariff is to protect American industries by excluding foreign products from our markets, and a protective tariff which was completely successful in this respect would produce no revenue. Import duties paid on commodities from abroad ordinarily have the same incidence as taxes on the production of domestic commodities; that is, they fall on the final consumers. Hence, these taxes may be criticized in much the same terms as those applied to excise taxes above, except that the fiscal adequacy of customs duties is more seriously open to question than that of excise taxes.

The Federal Tax System as a Whole. In some respects, it is difficult to summarize our study of the federal tax system. Some of its taxes are direct, others are indirect. Some are convenient and economical to collect, others are not. Some are progressive, others regressive. Certain generalizations may be made, however. The federal tax system as a whole ordinarily meets fairly well the test of fiscal adequacy. In depression or war years, of course, it sometimes fails to provide enough revenue to cover all expenditures which must be made, but it is difficult to imagine a tax system that would be perfectly elastic and adequate for all emergencies. In 1946, about 73 per cent of the total federal revenue was derived from taxes which were progressive, at least nominally. In the case of taxes on corporate incomes, however, there is no certainty that the progressive rates actually levied are converted into progressive rates on the incomes of the individual owners of corporations.

The federal tax system as it was at the end of 1945 may have been necessary or even desirable for purposes of war finance, but it would be open to serious objection in time of peace because of its probable effects

in restricting production and employment, and discouraging business ownership and the founding of new enterprises. The heavy excess profits taxes used in 1945 would have no place in a peacetime tax system, for they would deprive many firms of any incentive to do more business than had been done in the base period, and would place grave difficulties in the way of new firms which needed to increase their capital out of earnings. The excess profits taxes have been repealed, of course, but a number of further changes in the federal tax system would be desirable.

Proposed Changes in Federal Taxation. Excise and other non-progressive taxes may be necessary in years of unusually heavy expenditures, but the goal should be to collect from income and estate taxes as large a part as possible of the total federal revenue. In particular, the personal income tax should be the mainstay of federal taxation. For this purpose, it would be necessary that exemptions in connection with this tax be kept at a low level, and that surtax rates progress sharply in the middle income brackets, or up to the level of (say) \$20,000.

However, heavy dependence on income taxes in general would seem to require a number of changes in the application of the taxes. For one thing, complete offsets for losses against taxable income earned in earlier or later periods would be desirable in order to reduce as much as possible the deterrent effects of income taxes on investment. If income is taxed without offsets for losses being provided, risky investments are discriminated against, since they involve the greatest possibility of losses. A carry-forward period of six years and a carry-back period of two years would probably be adequate to provide complete offsets for losses for well-established firms and well-to-do individuals, but these provisions would not help unsuccessful new corporations which do not have any net taxable income in other periods against which losses could be offset. In such cases it might be desirable to have the federal Treasury pay the firms a fraction of their losses equal to the fraction which the Treasury would have taken out of net taxable incomes of the same size. That is, if a new firm would have to pay a tax of 20 per cent on a net income of \$20,000, then the Treasury would pay the firm 20 per cent on a net loss of \$20,000.

In the second place, the application of progressive rates of taxation discriminates against incomes which are irregular through time. Thus, an individual who had an income of \$50,000 in one year and then \$12,500 a year for the next four years would pay a much higher total tax over the five-year period than another individual with the same total income over the period who received \$20,000 each year. Considerations of equity would seem to require that the two individuals pay the same tax on the same total income over the given period. Relief could be given by allowing the taxpayer to recompute his tax liability on an average income basis at five-year intervals and secure a refund of the difference between this tax liability and the amounts of taxes actually paid. A similar averag-

ing principle might also be applied to exemptions, and to capital gains and losses. In the latter case, the averaging period should be equal to the number of years for which an asset was held prior to the realization of a gain or loss, and such averaged gains or losses could then be figured in fairly with ordinary income.

Third, small new firms are subjected to great difficulties when they are taxed at the same rates as large, well-established firms. Our tax laws should not discriminate against the former firms; on the contrary, quite possibly they should discriminate in their favor. It might be well to exempt corporate incomes up to \$25,000 from the corporation income tax, and possibly to treat small corporations as partnerships. Research expenditures should be defined liberally and treated as current expenses which could be used to offset current income. Along the same line, in the case of the personal income tax it would be desirable to employ differential tax rates, so that personal incomes derived from self-employment (operating enterprises) and from corporate dividends would be taxed less heavily than personal incomes derived from salaries or interest. And personal incomes invested in new plant and equipment, or in corporate stocks for the same purpose, might well be taxed at less than the regular surtax rates. The purpose of all these provisions would be to stimulate production, employment, business ownership, and particularly the founding and growth of new enterprises, while maintaining a high level of revenue for the federal government.

Fourth, the tax exemption privilege now accorded to interest on the bonds issued by state and local governments should be eliminated. At present, as has been said, "This exemption privilege is not only highly inequitable and costly to the Treasury but acts as a major deterrent to risk-taking. A wealthy taxpayer who is subject to a surtax rate of 65 per cent, for instance, will find investment in a tax-exempt 4 per cent bond equivalent to investment in a taxable venture paying 12 per cent before tax, quite apart from avoiding the risks of the higher yield security. The tax advantage of gilt-edged investment, and the relative disadvantage of risk investment, moreover, are greater the higher the surtax bracket. Risk investment, therefore, is deterred most at the very source from which venture capital should be expected to flow."³ This situation should be corrected immediately.

Fifth, community-property provisions and the option which husbands and wives now have of filing separate or joint returns should also be eliminated. In certain states, the income received by husband and wife is now regarded as community property. Each may lay claim to half the income and file a separate return, which results in a great saving in terms of income taxes. In the other states, husbands and wives may claim

³ Board of Governors of the Federal Reserve System, *Public Finance and Full Employment*, Postwar Economic Studies No. 3, Washington, 1945, p. 37.

only the income which they receive individually, but they may file either joint or separate returns so as to minimize their total income tax.

Finally, there is need for integration of the personal and corporate income taxes in order to avoid some of the difficulties mentioned earlier in this chapter. One proposal would abolish the tax on corporation incomes and bring these incomes under the personal income tax. This might be done by requiring every individual to declare annually, as part of his personal income, his proportionate share in the earnings of any corporations in which he was a stockholder, regardless of whether these earnings were or were not distributed to the stockholders. This would do away with double taxation as between corporate and personal income taxes, and would eliminate the troublesome question of whether a corporation has ability to pay taxes apart from the ability of its individual stockholders. If this proposal were considered too formidable from an administrative point of view, corporations might be allowed to deduct from their own taxable incomes all or part of the cash (or stock) dividends paid to the stockholders; or corporations might be taxed in full on their incomes, the individual stockholders being permitted to credit the taxes paid for them by the corporations against their personal income tax liabilities.

Apart from the changes which have been suggested in connection with income taxation, an attempt should be made to strengthen the estate tax. The estate and gift taxes should be coordinated more closely in order to prevent evasion of the estate tax through gifts in anticipation of death. The means of escape now provided by the tax-free transfer of life estates should be eliminated. The exemption might well be reduced somewhat from its present level of \$60,000 and the rates of taxation may need some revision.

STATE REVENUES

The state governments of the United States are like the federal government in being dependent primarily on taxation for their income. However, they derive a part of their income from such non-tax sources as special assessments; fines, forfeits, and escheats; subventions, donations, and assessments; earnings of general departments; and earnings of public service enterprises. In Table 53 we present sources of state tax revenue in 1945.

State Income Taxation. Because of the great variations in tax laws from state to state and the limitations of space, it will not be possible to discuss in detail the tax provisions of the several states. It is necessary to limit the present discussion to general considerations with respect to the tax systems of the state governments and to the incidence of such taxes as are not already familiar from our previous analysis. Income taxes

are used in about three-fourths of the states, and in most cases are not very different, in their general approach, from the federal taxes on income. Income taxes are much less important for state governments than for the federal government; nevertheless they produced 19 per cent of state tax revenues in 1945. A few states have recently adopted income taxes which provide that their citizens must pay a flat rate of 1 or 2 per cent on their entire incomes, or on incomes above a certain very moderate exemption. Such taxes are, of course, proportional in character and do not correspond to the principle of ability to pay, although they may be productive of large revenue.

TABLE 53. SOURCES OF STATE TAX REVENUE, 1945
(Source: *The Economic Almanac for 1946-47*, p. 302)

Source of Revenue	Amount Received (in millions)	Per Cent of Total Tax Revenue
Income taxes	\$ 809.9	19.0
Property taxes	228.6	5.4
Inheritance, estate, and gift taxes	131.9	3.1
Gasoline and motor fuel taxes	701.1	16.5
Sales and use taxes	1571.2	36.9
Business licenses	263.0	6.2
Motor vehicle licenses	406.4	9.5
All other taxes	143.2	3.4
Total tax revenue	\$4255.3	100.0

General Property and Inheritance Taxes. The general property tax is important and worthy of examination, but it will be treated in connection with the tax systems of local governments, where it assumes even greater importance than in state taxation. Inheritance and gift taxes are used in 47 states, and yielded 3.1 per cent of state tax revenues in 1945. In most states, the inheritance tax is levied upon the several shares of an estate, rather than upon an estate as a whole—which means that it is truly an inheritance tax, and not an estate tax. State inheritance taxes are often progressive in two directions. That is, the rate grows larger the greater the share involved and the more distant the relationship, if any, between the decedent and the heir. The incidence of the state inheritance taxes is similar to that of the federal estate tax.

Sales and Use Taxes. The sales tax has come into prominence, in recent years, as a source of revenue for state governments. The tax has been applied in most states, is based on retail sales, and usually runs from 1 to 3 per cent on the value of the articles sold. According to the data in Table 53, sales taxes and use taxes furnished 36.9 per cent of

state tax revenues in 1945. Use taxes are usually intended to prevent people from escaping sales taxes—just as gift taxes are designed to keep them from avoiding inheritance taxes—and have been adopted by most states which use sales taxes. Use taxes are levied as a charge for the privilege of storing, using, or consuming within a state any goods which have been purchased outside the state. A person who lives in a state that has a sales tax, and who purchases goods outside the state to avoid the sales tax, becomes subject to the use tax when he brings the merchandise home. The receipts credited to sales and use taxes in Table 53 apparently include the revenues received from state excises on liquors, tobacco, and other commodities, as well as those from sales and use taxes proper.

The sales tax—and this is true also of the use tax—is decidedly defective from the point of view of our principles of taxation; it is regressive in operation and does not conform to the principle of ability to pay. People with large incomes spend a smaller percentage of their incomes on the retail purchases subject to the tax than do poorer people, so that the tax takes a higher percentage of small than of large incomes. The sales tax is not so well received by the payers as some regressive taxes, for most of the sales tax laws require separate charging of the tax to retail purchasers, in order to promote the shifting of the tax to consumers and to make them conscious of the fact that they are paying it. The sales tax is costly to collect and not at all simple to administer.

Motor Vehicle and Gasoline Taxes and Fees. Most if not all states require the payment of a registration fee annually on all motor vehicles, and many collect additional sums for operators' licenses. Some have even imposed excise taxes on the purchase of new cars. Such excise taxes are paid once and for all, but the owners' and operators' fees are collected repeatedly. While these fees are not taxes in the strict sense of the term, they have about the same effect as taxes on consumption or on the operation of businesses which will shift the taxes to the consumers. The same is true of taxes on gasoline and other motor fuel. All of these taxes, therefore, tend to be regressive in operation. The taxes and fees in connection with the operation of motor vehicles produced 26 per cent of the total state revenues in 1945.

Other Items. Most states require individuals to have licenses in order to carry on certain businesses and to follow certain professions, and the states derive a considerable income from the fees charged for these licenses. For example, one must obtain a license and pay a fee to sell cigarettes, to operate a tavern, or to work as a barber. These fees become part of the cost of doing business and tend to be passed on to the final consumers through the prices of commodities and services. They produced 6.2 per cent of the total state revenues in 1945. In addition to the items listed in Table 53, payroll taxes in connection with unemployment compensation brought in large amounts of money for the states in 1945. How-

ever, these funds must be turned over to reserve accounts for paying unemployment benefits and should not be counted in general revenues available for ordinary expenditures. The state payroll taxes are similar to those levied by the federal government and tend to have the same incidence.

State Tax Systems as a Whole. In 1945, as in other years, by far the greater part of state revenues was derived from taxes which do not conform to the principle of ability to pay. This means that the revenue systems of the states are highly regressive in operation and that the burden of state taxation falls relatively more heavily upon the poor than upon the rich. On the other hand, the fiscal adequacy of state revenue systems has improved in recent years. State revenues and expenditures have both been increasing, but the revenues have increased faster than the expenditures, and a number of states have accumulated considerable surpluses.

LOCAL GOVERNMENT REVENUES

We shall use figures for cities with a population of 25,000 or over, in describing the sources of revenue for local governments. We see from Table 54 that these cities in 1944 received 74 per cent of their revenues

TABLE 54. SOURCES OF REVENUE OF CITIES WITH POPULATION OVER 25,000, 1944
(Source: *The Economic Almanac for 1946-47*, p. 315)

Source of Revenue	Amount Received (in millions)	Per Cent of Total Revenue
Property taxes	\$1725.5	64.8
Other taxes	245.8	9.2
Aid from other governmental units	454.2	17.0
Contributions from public service enterprises	49.0	1.8
Other non-tax revenue	189.6	7.2
Total revenue	\$2664.1	100.0

from taxation, largely from property taxes, which produced 64.8 per cent of total revenues and 87.5 per cent of tax revenues. The revenue from property taxes, in turn, was produced largely by the general property tax, which is the only important type of tax that we have not yet discussed. The "other taxes" levied by city governments include a wide variety of items, among them local income and sales taxes. The non-tax revenue includes, besides aid from other governments and contributions from public service enterprises, such things as fines, forfeits, and penalties; interest, rents, and royalties; donations and contributions; unclaimed money; special assessments; and service charges.

The General Property Tax. Since the tax revenues of city governments are derived in large measure from the general property tax, it will be well to analyze this tax carefully. The general property tax is a tax on property considered as a homogeneous whole, and is sometimes called "the uniform rule" of taxation. This means that the rate of the tax is to be uniform throughout the taxing district and for any amount of property. The tax is based upon the valuation or assessment of property in terms of money. These valuations are estimated by assessors at specified times, and the tax is applied at a certain rate, ordinarily upon the total valuation of the property of the taxpayer in question. Boards of Review are often created for the purpose of correcting inequalities and obtaining a uniform basis of assessment.

Defects of the General Property Tax. The general property tax is based upon the assumption that ability to pay is adequately represented by the ownership of "general property." The defects of the tax are numerous. In the first place, it is based on a mistaken notion as to the nature of property. Property is an institution which guarantees to the individual the right to use and control, to receive benefit from the ownership of, to exclude others from the use of, and to pass on to others at the time of death or before, whatever economic goods he may acquire. What is called "property" under this tax is in reality made up of two classes of things—wealth and claims upon wealth. Now when certain items of wealth and claims on these same items are both regarded as general property subject to tax, it is clear that double taxation arises. Thus, the corporation is taxed upon certain items of wealth, such as buildings and machinery, and the stockholder is taxed upon his shares of stock, which are the claim upon these articles of wealth. This is double taxation in the worst sense because it is largely if not entirely unintentional, and because an item of wealth and a claim upon that wealth are both taxed at the full rate charged other items of wealth which are not represented by similar claims. In the second place, it is assumed, at least by inference, that nothing other than "property" represents ability to pay taxes. This is clearly untrue at present, for many persons have very large incomes derived from personal services, but possess little wealth that is reached by the general property tax.

A third and important defect of the general property tax is that it is grossly inequitable. The assessment is made by assessors who are ordinarily dependent for their positions upon some of the people whose property is to be assessed. They are for the most part untrained and inexperienced, and do their work in a relatively short time. The result is inequitable valuation and taxation. Much intangible property (that is, claims upon wealth) escapes assessment altogether, while real and tangible personal property is assessed in a most discriminatory fashion. As expenditures have increased on the part of the governmental units dependent upon this tax,

it has been found necessary to increase the rate at which the tax is applied. This has given to the owners of intangibles an increased incentive to evade assessment, which means a smaller amount of property of this kind assessed and a still higher rate, which in turn stimulates further evasion, and so on. Evasion of the tax is easy on the part of owners of intangibles, because their correct assessment depends so largely upon the cooperation of the taxpayer himself.

Though in theory the tax is based upon proportion (that is, the same rate being intended to apply regardless of the amount of property an individual has), it seems altogether fair to say that the tax has been regressive in its operation. The owners of great wealth are able to consolidate much of their holdings in forms which escape the tax, while it is well known that real and tangible personal property is progressively underassessed. Thus, the rate actually paid upon "general property" tends to be lower, the greater the amount of property possessed by the individual. In addition, it becomes more and more difficult as time goes on to insure the fiscal adequacy of the tax, for it is not easy to adapt it to increasing fiscal needs. It is decidedly inelastic.

Classified Property Taxes. In some states and local governmental units attempts are made to avoid the difficulties arising under the general property tax by adopting what are called "classified property taxes." As the name suggests, the various items of wealth and claims upon wealth are divided into classes for purposes of taxation, with a different rate of taxation for each class. The purpose is to obtain a more equitable distribution of the burden of taxation and, of course, to make possible the more efficient administration of the taxation of property. The tax rate applied in each class is high or low, depending chiefly upon whether the items in the group can easily evade assessment and taxation. The lowest rate is accordingly applied to intangible personal property for the above reason and in order to avoid any serious double taxation. Tangible personal property is less mobile than intangible, but there are nevertheless means of evasion open for such items of wealth. Consequently, a moderate rate is usually applied in this group. Least mobile and least likely to evade taxation is real property, and the highest rate of all is imposed upon wealth of this type.

Improvement of the General Property Tax. Many suggestions might be made for improving the general property tax. The assessors should be appointed rather than elected, and the county should be the unit of assessment, with the whole procedure under state supervision and control. The collection of the tax should be improved, with delay allowances, and the remission or reduction of penalties, eliminated. The interest penalty for delay in payment should be two or three times the current rate on real estate loans, in order to prevent borrowing from the government through non-payment of taxes. No further exemptions from the tax should

be granted for the purpose of attracting business enterprises to a community, and a reassessment of "properties" should be made oftener than is at present the case. Constitutional limits on tax rates might well be repealed, and the tax should be used only to supply revenue for the local units of government.⁴

The Incidence of the General Property Tax. It is not feasible to discuss the incidence of this tax as a whole. It must be considered as it falls upon owners of different kinds of wealth. So far as the general property tax is a tax on land, the tendency is strong for the burden to rest finally upon the owner of the land, regardless of whether he pays the tax originally. Land is not a commodity produced at the will of man, but is fixed and non-extensible in amount, for all practical purposes. The rent of land, and consequently its value, are determined by the conditions of demand for and supply of land. There is nothing about a tax on land which will make its user willing to pay a higher rent for it, nor will its supply be affected in any way by such a tax as is ordinarily applied. Therefore the tendency is for the owner of land to bear the burden of any tax placed on it. It should be remembered that this is the case stated in its bolder terms. Many qualifications and variations of assumptions have been made in the past in presenting the theory of the incidence of the tax on land, but in the majority of the cases which are of practical importance the tendency as stated above is clearly observable.

The incidence of the tax tends to be quite different when it falls on buildings, rather than on land itself. A tax on buildings tends to fall upon the tenant rather than on the owner, unless these two happen to be the same person. Buildings are simply one form of the investment of capital, and if a tax is imposed which temporarily falls upon the owners and makes the return from this investment smaller than that which can be obtained in other lines, the tax tends to be shifted. The process of shifting is a long-run process, and comes about through an exodus of capital from the taxed form of investment, which enables the capital that remains in this line to receive as high a return as it received before the imposition of the tax.

A tax on buildings, then, seems to be merely one case of the taxation of capital. So far as a tax falls upon some lines of investment and not upon others, or upon some more heavily than upon others, there is a tendency for it to be shifted through the process outlined in the preceding paragraph. So far as a tax affects all capital alike, its shifting or non-shifting depends upon whether, in the long run, the tax is sufficiently high to operate as a check upon saving and the accumulation of capital. To the extent to which the general property tax is imposed on articles of wealth which will be used not as capital in further production but merely for

⁴ These recommendations are from *Facing the Tax Problem*, New York, Twentieth Century Fund, 1937.

personal consumption, the prospect of shifting the tax is practically nil, because such articles do not ordinarily enter into later price transactions.

Conclusion. Since about three-fourths of the total federal revenues are received from taxes which are at least nominally progressive, and since federal revenues are several times as large as those of state and local governments combined, it is possible to say at present that taxation in the United States is on the whole progressive in operation. In other words, the larger part of our total tax revenue is received from taxes which take a larger percentage of large than of small incomes. This is a desirable situation and it should be maintained.

It appears that federal revenues will continue to be several times as large as those of state and local governments combined for some years to come. Thus, if the tax system as a whole is to be kept on a progressive basis, any reductions in federal taxation which become possible should be accomplished largely through the reduction or elimination of excise and other unprogressive taxes. The changes in excise taxation should be accompanied by commitments, on the part of the industries affected, that the savings which result will be passed on to the consumers in the form of lower prices. On the other hand, exemptions under the personal income tax of the federal government should be kept low so that almost all income receivers will make some contribution, however small, to the direct support of the government, and will be aware that they are making such contributions. This may aid in bringing about a public understanding of the relationship between the performance of functions by the government and the necessity of contributing to the support of the government, and thus help to correct the unwholesome, careless attitude toward public funds which has existed in the past.

It is probably too much to expect that regressive taxes can be entirely abandoned, especially since some of them are rather satisfactory from an administrative point of view because they are certain, convenient, and economical in collection. And the use of these taxes may have to be extended at times. When more revenue is needed during a depression—a time when large profits are only a memory and everyone's income is greatly reduced—it may be necessary to extend the use of excise, sales, and other taxes as a temporary expedient. Again, if there is need to finance an enormously expensive war program, it may be necessary to extend the regressive taxes as well as increase rates and lower exemptions in connection with progressive taxes. But such extensions of regressive taxes should be clearly recognized as emergency measures, and not accepted as permanent changes in our system of taxation.

Finally, there should be a closer integration between the tax system of the federal government and the systems of state and local governments. Some difficulties are bound to arise when all the various governmental units levy taxes on incomes, inheritances, and other sources of revenue.

On the other hand, it would not be desirable to make the state and local governments depend entirely on taxes which the federal government did not care to levy. In particular, state and local governments should not increase the use of regressive taxes as these taxes are reduced or discarded by the federal government. In view of these considerations, it might be desirable to eliminate the state and local tax systems and leave only that of the federal government. In this way all taxes would be collected by the federal government and the revenue divided among the various governmental units. Competitive taxation of the same sources of revenue by various governmental units would thus be eliminated, and it would be more easily possible to keep the tax system as a whole on a progressive basis, since the federal government would know that its actions would not be offset or canceled by those of state and local governments.

1. What is the nature of taxation, and how is taxation related to public expenditures?
2. What is the problem of taxation?
3. What is the first test of a sound tax system?
4. If a tax system meets this test, what is the next most important consideration? Why?
5. What are the other requisites of a sound tax system?
6. Why is the principle of ability to pay considered superior to other principles as a basis for distributing the burden of taxation?
7. What is at present the most generally accepted indicator of ability to pay? Why?
8. Does taxation according to ability to pay point to regressive, proportional, or progressive taxation? Explain.
9. Distinguish between direct and indirect taxes.
10. List the principal sources of federal revenue.
11. What are the principal characteristics of the personal income tax as applied by the federal government?
12. Comment on the merits and defects of our federal personal income tax.
13. Is the personal income tax a direct or indirect tax? Why?
14. Describe the federal corporate income tax. Why do some people object to this tax? Explain.
15. Does this tax lead to double taxation? Why?
16. Is double taxation always objectionable? Why?
17. Explain how the capital stock tax and the declared value excess profits tax work in combination.
18. Compare the declared value excess profits tax with the excess profits tax of 1940.
19. How does the federal government tax estates? Explain.
20. State and answer the chief objections which are raised against the federal estate tax.
21. What are excise taxes and who bears their burden? Explain.

22. Are excise taxes desirable in themselves? Why?
23. Comment on the importance and desirability of customs duties in our federal tax system.
24. Make several suggestions for the improvement of the federal tax system.
25. Describe the principal sources of state tax revenue and criticize state tax systems as a whole.
26. What is the sales tax and how is it used? Is it a desirable tax? Explain.
27. What are the principal sources of city revenues?
28. In what respects is the general property tax defective?
29. What steps may be taken to avoid the difficulties which have been experienced with the general property tax?
30. What is the incidence of the general property tax? Explain.
31. How does the combined tax system of federal, state, and local governments measure up to the tests of a sound system of taxation? Explain.

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Agriculture

THE WIDE PUBLICITY GIVEN THE AGRICULTURAL PROBLEM IN THE TWO DECADES before World War II made most Americans aware of its existence, but there were many who did not take this problem seriously. They regarded our farmers as no worse off than other enterprisers, but a good deal noisier about such troubles as they had. It is likely that this attitude resulted from a lack of understanding of the situation. It is difficult to believe that anyone thoroughly familiar with the importance of American agriculture, and the nature of its difficulties, could have failed to see the seriousness of this problem.

The Importance of American Agriculture. Agriculture is important as a source of both food and certain raw materials used in manufacturing industries. The farm population in 1945 was 25,190,000, or 18.1 per cent of our estimated total population. There were 6,097,000 farms in 1940, and the total value of farm land and buildings amounted to \$50,295,000,000 in 1945. The gainfully employed in agriculture in 1945 numbered 9,833,000 persons, or 15.9 per cent of the total for the country. The number of gainfully employed in agriculture was greater than in any other branch of economic activity except manufacturing, in which the total was 13,288,000, or about 35 per cent greater than in agriculture.¹

Clearly, an industry as extensive as agriculture is of great importance to other industries and to the country as a whole, and not merely to those who devote their energies to it. It is difficult for manufacturing industries or other economic activities to prosper when the farmers' income is greatly reduced, or for the nation as a whole to achieve a high level of economic welfare with American agriculture on the verge of economic ruin. And this was the condition that prevailed in our farming industry in the great depression following 1929.

THE CAUSES OF THE FARM PROBLEM

The main problem of agriculture, or at least the one which is best known, is the unfavorable price-cost relationship for major farm products, and the unsatisfactory general levels of farm income which prevailed for

¹ These data are from *The Economic Almanac for 1946-47*, New York, National Industrial Conference Board, 1946, pp. 110, 111, 131, 153.

many years after World War I. But the farm problem is in reality a group of closely related problems, which include soil erosion, dust and flood control, the migration of farm workers, farm debts, farm credit, tax delinquency, share-cropping, farm tenancy, and many other matters. Our discussion will deal for the most part with the main problem of price-cost relationships.

The Question of Overproduction. The main farm problem was not wholly a product of the post-1929 depression. It had existed in more or less serious form at least since the end of World War I in 1918, and was merely intensified by the depression. If a large number of individuals selected at random were asked to name in a word the cause of the farm problem, it is probable that the majority would blame *overproduction*. Let us see what this term means, as applied to the agricultural problem. It is practically certain that this country has not in recent years had an overproduction of farm products, in the sense of more farm goods than our people would have willingly used if they could have obtained them without payment. And it seems equally likely that our total farm output of recent years could have found purchasers at some price or other.

Whatever overproduction has occurred has been overproduction in the sense that the quantities of farm goods that have been turned out have not been salable at prices which would cover their costs of production, in the economic sense. As a consequence, large surpluses of some kinds of farm products accumulated, and in the matter of real income the farmers steadily lost out, as compared with other types of American producers. Many factors contributed to bring about this unfortunate and inequitable situation.

The War Demand for Farm Products. The tremendous foreign demand for American farm products, during and immediately after World War I, gave a great stimulus to agricultural production in this country. The countries at war had to take many men, and in some cases much land, out of agricultural production, with the result that the output of farm products, especially in Europe, fell off greatly. The countries affected were anxious to buy at high and even exorbitant prices all the farm products that we of the United States would send them. Hence, the war period was one of rapid increase in the foreign demand for our agricultural produce.

Supply Changes. On the supply side, important changes took place at about the same time. In the first place, the mechanization of agriculture developed rapidly. The tractor came into more general use on the farm during this period, and made possible the development and utilization of larger, more complicated, and more efficient farming implements of other types than had previously been used. Again, methods of cultivation were improved under the guidance of the United States Department of Agriculture. Our farmers learned much about the control of insect pests

and other crop parasites, the benefits of seed selection and proper fertilization, and the most improved methods of animal breeding and feeding. Finally, as a result of the favorable price situation, the improved methods of cultivation, and the mechanization of the farms, still other changes in agriculture took place. It now became feasible to bring under cultivation land areas which had been too poor to use under former conditions. Farmers were encouraged to specialize in raising money crops for the market, instead of continuing to engage in diversified farming. The increasing use of mechanical power, both on and off the farm, reduced the amount of land needed to produce feed crops for animals, and the land released in this way was often devoted to producing more of the great staple money crops.

Wartime Production and Income. Under the influence of favorable demand and supply conditions, agricultural production as a whole increased by about 10 per cent between 1915 and 1920,² the acreage under cultivation expanded slightly, and exports of agricultural products grew. Net income from agriculture increased from \$5,921,000,000 in 1915 to \$12,699,000,000 in 1919.³ This large increase in income would not have meant much to the farmers if the prices of the products they bought had increased as fast as the prices they received for their own products; but this was not the case. If the years 1909 to 1914 are taken as the base period for index numbers of both prices received by and prices paid by farmers, we find that prices received by farmers were 204 in 1918, while prices paid by them were 173. In 1919, these two index numbers were 215 and 198, respectively.⁴ Therefore, the farm income of this country increased both absolutely and in relative purchasing power during the war and early post-war years.

Post-War Conditions. But these favorable conditions for our agriculture did not last long. After the close of World War I, agricultural production picked up in Europe so that within a few years many of the European countries had reached the pre-war level in this respect. As a result, their demand for American farm products declined. Moreover, many of the less highly industrialized parts of the world were able to increase their agricultural production substantially through the use of improved methods and machinery; and they began to compete strenuously for the foreign markets which Americans had been supplying with farm products. Some European countries were not content to have their agricultural production merely reach pre-war levels. Under the influence of programs of extreme nationalism, many attempted to become self-sufficient, or largely so, with respect to important foods and raw materials

² Board of Governors of the Federal Reserve System, *Agricultural Adjustment and Income*, Postwar Economic Studies No. 2, Washington, 1945, p. 2.

³ National Industrial Conference Board, *The Economic Almanac for 1945-46*, p. 168.

⁴ *Ibid.*, p. 170.

which they had formerly imported in large quantities. This they did despite the fact that their land areas were often poorly adapted to raising these goods, so that the costs of producing them at home were excessive.

The American policy of discouraging imports, as developed in our high protective tariff laws after the war, hindered our farmers in their efforts to retain export markets. The eventual and inevitable curtailment of the large loans Americans had been granting abroad for the purpose of financing exports increased the difficulty of selling farm products to foreigners. From the domestic point of view it may be true, as is often claimed, that changes in the diet of the American people had a depressing influence on the market for farm products, and the adoption of prohibition may have had a similar effect.

In the face of unfavorable market conditions at home and abroad, agricultural production in the United States increased another 10 per cent during the 1920's. The prices of agricultural products, which had dropped 41 per cent from their wartime peaks by 1921, remained low during the 1920's, whereas prices paid by farmers were much better maintained.⁵ By 1929, the index of prices received by farmers stood at 149 on the basis of 1909-14 prices as 100, while the index of prices paid by farmers was at 167.⁶ Net income from agriculture, which had reached a peak of \$12,699,000,000 in 1919, varied between 7 and 9 billion dollars in the 1920's and was \$8,720,000,000 in 1929.⁷ Thus agriculture was relatively depressed during a period in which industry was experiencing a boom of unprecedented proportions.

Agriculture in the Great Depression. With the coming of the great depression after 1929, the bottom really fell out of the market for agricultural products, and exports declined drastically. On the other hand, agricultural production was well maintained during the depression and declined only to 117 (1909-14=100) in 1932, the worst year of the depression.⁸ The net income from agriculture fell from \$8,720,000,000 in 1929 to \$3,040,000,000 in 1932.⁹ The effects of the decline in farm income were the more severe because the prices received by farmers for their products fell faster and further than the prices paid by farmers for the goods they bought. The index of prices received by farmers fell from 149 in 1929 to 90 in 1931 and 68 in 1932, while the index of prices paid by farmers fell only from 167 in 1929 to 142 in 1931 and 124 in 1932.¹⁰ The *ratio* between these index numbers in 1932 was about 55. This means

⁵ Board of Governors of the Federal Reserve System, *Agricultural Adjustment and Income*, pp. 3, 4.

⁶ National Industrial Conference Board, *The Economic Almanac for 1945-46*, p. 170.

⁷ *Ibid.*, p. 168.

⁸ Board of Governors of the Federal Reserve System, *Agricultural Adjustment and Income*, p. 3.

⁹ National Industrial Conference Board, *The Economic Almanac for 1945-46*, p. 168.

¹⁰ *Ibid.*, p. 170.

that in that year the farmers, by giving up products worth \$1.00 in terms of the base period, could obtain other products worth 55 cents in terms of the same period.

Many of our manufacturing industries, by virtue of their monopolistic or monopoloid situations, were able to keep prices relatively stable during the depression and take their losses in the form of idle plant and equipment rather than by selling their products at low prices. For example, from 1929 to the spring of 1933, the output of farm implements dropped 80 per cent, of motor vehicles 80 per cent, of cement 65 per cent, of iron and steel 83 per cent, and of automobile tires 70 per cent. However, the prices of farm implements in this period declined only 6 per cent, of automobiles 16 per cent, of cement 18 per cent, of iron and steel 20 per cent, and of automobile tires 33 per cent.¹¹ If, in the face of a declining national income, some prices do not fall, the effect is to depress other, competitive prices to a greater extent than would otherwise be necessary. The farm industry, being operated by millions of independent enterprisers, was unable to protect itself in this situation, and the fall in farm prices was disastrous.

The Insensitiveness of Farming. Two important questions should be raised at this point. The first of these is, Why did not the farm industry, like the manufacturing industries, recognize the existence of unfavorable demand conditions and reduce output all along the line? And the second question is, Would not the farm problem have solved itself eventually through the operation of natural economic forces, such as the business failure of increasing numbers of farmers and the gradual reduction of the acreage in cultivation and, hence, in the size of crops?

In answer to these questions, it may be said that farming is apparently less sensitive than most industries to changes in demand conditions and the prices of its products. When manufacturers can no longer make ends meet, they fail and their output is withdrawn from the market. Or, in some instances, manufacturing concerns, before reaching the failure stage, decide to cooperate with one another in the reduction of output and maintenance of prices. The farmer seldom fails. Those who have lent him money are usually lenient in allowing him to continue in business, even though he defaults on his obligations. Even when he loses his farm through mortgage foreclosure, he is often permitted to remain on the land and cultivate it. Moreover, it is practically impossible for the many independent growers of a crop to cooperate with one another voluntarily to restrict output and maintain prices as manufacturers are given to doing.

So long as the farmer can stay on the land, he is likely to keep on producing to the utmost of his ability, for his total costs are made up largely of fixed costs. Payments for interest, rent, and taxes cannot be

¹¹ United States Department of Agriculture, *Yearbook of Agriculture, 1935*, Washington, Government Printing Office, 1935, p. 5.

reduced readily, and the farmer cannot gain by laying off his own labor or that of his immediate family. Payments for hired labor, seed, fertilizer, and power are about the only variable costs of the farmer, and these are small compared with total costs. When the prices of his products fall, he can save comparatively little by cutting down output. Indeed, falling prices for farm products, within limits, may result in increased rather than decreased farm production, since it takes more bushels of wheat or pounds of cotton to pay a given amount in taxes or interest when farm prices are low than when they are high.

The burden of fixed costs bore heavily on the farmer after World War I. Agriculture was so prosperous during and immediately following the war that farming land increased rapidly in value, and many farms changed hands at greatly inflated prices. The mortgages which usually accompanied such changes in ownership called for large interest payments and these became difficult to meet in later years. The total amount of interest payable by farmers in 1930, 1931, and 1932, was 96, 92, and 87 per cent, respectively, of the total payable by them in 1929. Similarly, the assessments on farming land for tax purposes increased during and following the war, and it was difficult, of course, to secure later reductions in these assessments. The taxes payable by American farmers in 1930, 1931, and 1932 were 100, 92, and 79 per cent, respectively, of their 1929 taxes.¹²

Thus, in the great depression following 1929, the farmers, with their fairly stable money costs and sharply reduced incomes, were in very serious straits. Thousands lost their farms through foreclosure, and the situation finally became so bad that groups of farmers sometimes banded together to prevent foreclosures and sheriff's sales, even by violence, if necessary. There were also farmers' strikes and riots, in which groups of farmers attempted to destroy farm produce on its way to the market, or otherwise to prevent the marketing of farm products until prices should improve. In some cases, crops were left to rot in the fields, or were destroyed, because they could not be sold at prices sufficiently high to cover even the necessary expenses of harvesting them. It may be argued, some years after the event, that these conditions in agriculture would eventually have corrected themselves through the action of natural economic forces. A solution of the farm problem might or might not have come about in this way. Given the best of good luck, solving the farmers' difficulties without governmental assistance would have been a long and painful process. At any rate, attempts had previously been made to give assistance to the farmers and, since the Roosevelt administration undertook to adopt a general recovery program, it was probably necessary both economically and politically to do something about the agricultural problem.

¹² *Statistical Abstract of the United States, 1935*, p. 590.

Soil Erosion. The main farm problem, as we have already described it, was bad enough, but in later years our farmers have been menaced by a serious increase in soil erosion. While soil erosion is not of recent origin, it has only lately come to command great public attention. The extension of cultivation to new areas formerly used for grazing has stripped the soil of natural protective vegetation and, as a result, the uncontrolled forces of wind and water have severely damaged millions of acres of farming land.

In some parts of the country, the land, denuded of trees and other vegetation, is no longer able to hold the moisture which it receives at times. A considerable part of the rainfall runs off the surface, provides but little moisture for plant growth, and carries away with it many tons of fertile soil. But in the past several years soil erosion by wind has perhaps exceeded erosion by water in its destructive effects. Some of the severe dust storms originating in our western states have moved eastward to the Atlantic coast and passed out to sea, bearing with them untold thousands of tons of valuable soil whirling about in the air at a height of two or three miles.

According to government reports, soil erosion has ruined some 50,000,000 acres of farm land and badly damaged 50,000,000 acres more, and much additional land is in serious danger. Erosion dissipates fertile soil through dust storms, piles up soil on the lower slopes, spreads poor subsoil over rich bottom lands, increases the danger of floods, and robs wild animal life of essential food and cover. It also leads to the silting and sedimentation of stream channels, reservoirs, dams, ditches, and harbors, and damages roads, railways, irrigation works, power plants, and public water supplies.¹³

Soil erosion is said to be largely the result of overcropping—an unsound practice which, besides leading to erosion, makes the tillage of the soil more difficult, reduces its content of plant food, and increases the danger of drought. Depletion of the soil has been especially serious in the South, where an average of 80 per cent of the agricultural land has been kept in soil-depleting crops. Such crops as cotton and corn leave the land bare in the winter season and highly subject to erosion under the influence of the moderate climate and heavy rainfall.¹⁴

Methods have been devised for controlling soil erosion, but it is difficult to accomplish much through individual action, since the average farmer lacks the necessary skill, the financial means, and even the incentive to attempt erosion control. Since erosion is caused, or at least facilitated, by unwise use of the soil, it is directly related to the main agricultural problem. It is possible to prevent or greatly reduce soil erosion by putting land into such close-growing crops as alfalfa or blue-

¹³ *Yearbook of Agriculture, 1937, p. 19 et seq.*

¹⁴ *Ibid., p. 13.*

grass, but it is difficult for farmers to do this when their economic situation is so acute that they need all their land for money crops, such as wheat or cotton. Even the rotation of soil-protecting crops with money crops in alternate years would be helpful in checking soil erosion; but when farmers need, year after year, every penny that they can scrape together, they are likely to plant money crops continuously and let nature take its vengeance. In any case, the individual farmer usually feels that he can do little about soil erosion without the cooperation of other farmers. The methods of handling soil erosion, and the present program of the federal government, will be described later in this chapter.

EARLY ATTEMPTS TO SOLVE THE FARM PROBLEM

We have seen that the farm problem was not caused by the post-1929 depression, but was merely intensified by it. Furthermore, attempts to solve the problem did not wait upon the great depression, but began to appear soon after World War I. An ineffective attempt of this kind took the form of tariff changes in 1922, which placed high rates of duty on imports of agricultural products. The avowed purpose was to protect the domestic market of the American farmer. But he already had such protection, for imports of agricultural products competing with our own had never been heavy. The protection of the home market did our farmers little good, for they were producing agricultural goods in quantities too great to be absorbed by the domestic market at favorable prices, and were rapidly losing their essential export markets. What the farmers really needed was the ability to export. The only tariff change capable of helping the farmer would have been a reduction in the tariff duties on imported manufactures, enabling foreigners to sell their goods to us and thus be in a position to buy our surplus farm produce.

Attempts to Control Surplus Production. Since the farmers were producing more than the domestic market could absorb, and were losing their export markets, attention turned in the next few years to the question of surplus production. Two measures designed to give relief were vetoed by President Coolidge. One of these, the McNary-Haugen Act, provided that a so-called equalization fee or tax should be levied on the output of certain agricultural products, to provide funds to reimburse farmers for the losses incurred in exporting surplus farm products. This plan was expected to decrease the volume of agricultural products sold in the domestic market and maintain domestic prices for these articles well above the foreign level. The second relief measure involved what was called the debenture plan. The idea was to stimulate the exportation of farm products by granting bounties, in the form of debenture certificates, for such exports. The bounties were to equal the difference between the domestic prices of farm products and the prices received in

the foreign market. The certificates were to be accepted by the federal government in payment of import duties, so that there would be a ready market for them. The purpose of this Act was, of course, to reduce the volume of farm products sold in the domestic market and thus raise prices.

The Federal Farm Board. In 1929, the Agricultural Marketing Act was passed by Congress and approved by President Hoover. The Federal Farm Board was set up to carry out the provisions of the Act, and was given one-half billion dollars for use in stabilizing the prices of farm products. While more than one course of action was open to the Board, its chief activity consisted of the purchase of a large part of our surplus output of such products as wheat and cotton, and the storage of these commodities in warehouses. For a time, the Board had some success in producing artificially high prices for these articles, but it failed eventually because it attempted to provide high prices for farm products without putting any effective check upon agricultural production. Naturally, the financially embarrassed farmers, with no restrictions on production, were stimulated by the high prices to increase their output. It seems likely that the equalization fee and debenture plans would, like the Agricultural Marketing Act, have proved defective as solutions of the farm problem.

THE FARM CREDIT POLICIES OF THE ROOSEVELT ADMINISTRATION

The Farm Credit Administration. Several steps were taken by the Roosevelt administration, in its first year in power, to provide debt relief and additional credit facilities for farmers. The Farm Credit Administration was formed in 1933 by Executive Order for the purpose of bringing a number of existing farm credit agencies under one head, and administering the emergency legislation. Operating under the Farm Credit Act, it helped farmers to develop a system of several hundred local production credit associations, to provide farmers with production and marketing credit at low cost. These associations made loans to farmers on crop and chattel security and charged interest rates of approximately 5 per cent, which was some 2 or 3 per cent less than private agencies would have charged for the same type of credit.

Emergency Farm Mortgage Legislation. As has been suggested, the farm mortgage situation during the depression was desperate. In 1932, farm mortgage debts amounted to 8.5 billion dollars, out of a total farm debt of 12 billion dollars. The total debt was more than twice the amount of the gross farm income of 1932, and about equal to that of 1929. Under the Emergency Farm Mortgage Act, the Farm Credit Administration reorganized the Federal Land Bank System and set about refinancing farm mortgage debts. The Act authorized for this purpose the issuance of

two billion dollars' worth of new Federal Farm Loan Bonds, on which the federal government guaranteed interest at the rate of 4 per cent. The proceeds of the bond issue were used to make new loans to farmers or to purchase their mortgages, and some bonds were exchanged directly for mortgages.

The holders of farm mortgages, anxious for settlement after a long period of waiting, were sometimes willing to scale down their claims. Such reductions were obligatory in some cases, for the Land Bank loans, with prior liens, could not exceed 75 per cent of the normal value of the property given as security. In any event, after the mortgages were taken over by the government, the process of refinancing began. These new mortgage obligations of the farmers were to be liquidated over a long period of years, and no payments on the principal had to be made for five years. The interest charge was not to exceed $4\frac{1}{2}$ per cent, as compared with 5 to $6\frac{1}{2}$ per cent formerly paid by farmers.

The Mortgage Moratorium. Under the Frazier-Lemke Act, passed by Congress in 1935, a farmer, faced with foreclosure and unable to get a reduction in his mortgage obligations by direct dealings with his creditors, could apply to the courts to declare him a bankrupt. The court dealing with his case was given the power to stay all legal proceedings against the farmer for a period of three years, during which time he could retain possession and use of the mortgaged property by paying a reasonable rental. At any time during the three years, the court could order an appraisal of the mortgaged property and the farmer could obtain full title to it by paying the appraised value, regardless of the amount of the mortgage obligation. To protect the rights of creditors, it was provided that any creditor who had as security a lien on the property could demand that it be sold at public auction. In this case, the court was required to conduct such a sale after due notice, but the former owner was thereafter to be given ninety days within which he could recover full title to his property by paying the auction price, plus interest at 5 per cent.

The Commodity Credit Corporation. In late 1933, the Commodity Credit Corporation was set up for the purpose of making loans to farmers on their holdings of specified crops. It could lend a farmer 10 cents a pound on his cotton, without liability to him, if he would agree to take part in the 1934 acreage reduction program. A similar offer was made available for corn growers after the corn-hog adjustment program had been set up. That is, in states where corn could be held on the farm under seal, secured by warehouse receipts, the growers could secure a loan of 50 cents a bushel on their holdings, provided they agreed to cooperate in the agricultural adjustment program in the following year. These provisions for loans assured the growers a certain return for their products, and also enabled them to gain by any increases in prices which might result from the operation of the agricultural adjustment program.

These various credit policies were closely tied up with the main agricultural problem. With the pressure of debt obligations reduced, the farmers no longer felt it imperative to keep every possible acre of soil planted to money crops, and were willing to cooperate in a program for controlling agricultural production. Again, the crop loans to farmers made it unnecessary for them to throw their products on the market for whatever they would bring—a course of action which could have depressed the prices of these products still further, or would at least have kept them from rising. The loans made it possible for farmers to withhold a part of their current production from the market, and thus aided the administration in realizing its object of raising the prices of these agricultural products.

THE AGRICULTURAL ADJUSTMENT PROGRAM

Parity Prices. The principal aim of the Roosevelt administration in aiding American farmers was to increase farm incomes and purchasing power by controlling production and raising prices. This objective was sought first through the Agricultural Adjustment Act of 1933, which declared it to be the policy of Congress to establish and maintain a relationship between the production and consumption of farm products which would bring the prices received by farmers to such a level as to give these farm products a purchasing power, in terms of the commodities that farmers buy, equivalent to the purchasing power of the farm products in the "base period." This period was the five years preceding World War I, or from the middle of 1909 to the middle of 1914, except in the case of tobacco. The policy was applied originally to wheat, cotton, field corn, hogs, rice, tobacco, and milk and its products, but in 1934 the list of basic products was amended to include beef and dairy cattle, sugar, peanuts, rye, flax, barley, and grain sorghums. The interests of consumers were to be protected by seeing to it that the adjustment of farm production did not raise the percentage of the consumers' total retail expenditures which farmers received above the percentage they received during the base period.

The Reduction of Output. To achieve the objects of this legislation, the Secretary of Agriculture was empowered to arrange for reductions in the output of basic agricultural commodities by making agreements with farmers to cut down acreage and paying them rentals or benefits in return for such cooperation. The amount of reduction required in the case of specific farm products, and the amount of benefit or rental payments, were to be determined by the Secretary of Agriculture. For example, the Secretary entered into some 1,010,000 contracts with individual cotton growers in connection with the 1934 crop. Every grower who accepted the plan agreed to reduce his acreage planted to cotton by not less than 35

per cent or more than 45 per cent of his average acreage during the preceding five years; and these idle acres he leased to the Secretary of Agriculture. He promised also not to increase his total acreage of *all* crops, after deducting the contracted reduction in cotton acreage; not to increase his acreage in other "basic commodities"; and to use the land rented by the Secretary only for such purposes as might meet with the approval of that official.

In return for his cooperation in the respects outlined above, the cotton grower was to receive from the government a benefit or rental payment which would amount, on the average, to about $4\frac{1}{2}$ cents per pound on the cotton which would have been grown on the land rented to the Secretary, based upon the five-year average production for 1928 to 1932. Since cotton production during this period averaged about 174 pounds an acre, this meant a payment of \$7.85, on the average, per acre of land removed from cultivation. If considered as rent alone, this would have been quite a heavy payment for the land, but it was intended also to compensate cotton growers for labor and capital withheld from production. Similar programs were arranged for other basic commodities.

The Processing Taxes. To secure funds with which to administer the program and pay benefits to farmers, the Secretary was authorized to levy taxes on the processors of the basic farm products. For example, manufacturers of cotton goods were required to pay taxes based on the quantity of raw cotton entering into their products. The processing tax on each product was to equal the difference between its current average farm price and its "fair exchange value"—that is, a price which would give the seller as much purchasing power as its sale would have given during the base period 1909–14. However, if it developed that this rate of tax would not prevent the accumulation of a surplus stock of any commodity, a higher or lower tax rate could be charged.

Marketing Agreements and Licenses. As an alternative form of control, the Secretary was permitted to enter into marketing agreements with processors, associations of producers, and others engaged in handling agricultural commodities or products thereof in interstate commerce, and to require these persons to obtain licenses authorizing them to carry on their customary activities in connection with these or competing products. These licenses might be suspended or revoked for cause, and the licensees could be required to furnish detailed information as to their business transactions in these products.

The Soil Conservation and Domestic Allotment Act. In January, 1936, the Supreme Court of the United States found the Agricultural Adjustment Act of 1933 unconstitutional by a 6 to 3 vote. The Court held that the Act constituted an invasion of states' rights, since the Constitution did not give the federal government the power to regulate agriculture, and its power to control interstate commerce could not be stretched to include

the regulation of agricultural production. Moreover, it was held to be improper for the federal government to purchase compliance with a federal program, and thus attain indirectly that regulation of local affairs which had been specifically denied it by the Constitution. While agriculture can hardly be considered a matter of local concern from an economic point of view, it appeared to be purely so according to this interpretation of the Constitution.

Since the federal government was unwilling to see American agriculture return to its previous chaotic state and since no permanent solution of the farm problem had been found, the government launched forth upon the discovery of a new farm program. In its search, it soon came upon the problem of soil erosion, upon which we commented earlier in this chapter. Satisfactory methods of combating soil erosion had been developed. Several types of close-growing vegetation, such as grass and alfalfa, are helpful in holding the soil in place and reduce water and soil losses very materially. Amazing results may be achieved merely by rotating such soil-conserving crops with the money crops, such as corn and cotton.

A method known as strip-cropping is also helpful in preventing soil erosion under favorable conditions of cultivation. Strip-cropping means the alternation of close-growing crops with the money crops in strips of a certain width, depending on the degree of slope and other factors. This method of controlling soil erosion often requires help from other mechanical methods, especially on the steeper slopes, for land is in danger of erosion whenever it is planted to cultivated or money crops. In such cases, methods such as terracing the land and using broad, contoured channel ways for drainage have often proved helpful in reducing sheet erosion and severe gullyng.

The chief difficulty with erosion control in the past was to get the farmers actively interested in it. The individual farmer often felt that he could do little about soil erosion by himself, or he lacked the financial resources which would permit him to make the attempt. Under unfavorable farm conditions, the farmers often considered it necessary to use almost all their land for money crops and to keep it planted to such crops year after year, in order to make ends meet. In 1936, after the A.A.A. was declared unconstitutional by the Supreme Court, the government decided to undertake a program of erosion control which would also help to solve the main farm problem.

Consequently, in February, 1936, a previously existing Soil Conservation Act was amended and enlarged to become the Soil Conservation and Domestic Allotment Act. The Act authorized the Secretary of Agriculture to restore the pre-war relationship between farm and city incomes for those farmers who agreed to practice specified methods of soil conservation and erosion control. Two classes of benefit payments were made available for farmers who cooperated. Payments for soil conservation were granted

to farmers for transferring a part of their soil-depleting base acreage to soil-conserving crops or uses, and other soil-building payments were made available for farmers who adopted certain approved practices to restore soil fertility, such as new seedings of legumes or perennial grasses; seedings of soybeans, cowpeas, and the like, for green manure; and the use of strip-cropping or terracing methods. The relation of this conservation program to the main farm problem is obvious. If the farmers used part of their land for crops which would be effective in preventing soil erosion, they could not use it for producing the basic money crops. In this way it was planned to kill two birds with one stone—to achieve some highly desirable results by way of controlling soil erosion, and at the same time to prevent the overproduction of the basic crops.

The Agricultural Adjustment Act of 1938. The soil conservation features of the Act of 1936 were undoubtedly desirable, but the Act proved rather ineffective in controlling agricultural production. By 1938, the prices of basic products had slumped badly, large surpluses were on hand, and additional large crops were in prospect. As a result, Congress passed the Agricultural Adjustment Act of 1938 in February of that year. This Act provided for the continued operation of the Act of 1936, and its payments to farmers, in normal times. In years of overproduction, however, rather stringent methods of control were to go into effect.

Control of agricultural production was carried on by means of acreage allotments, marketing quotas, and commodity loans. The acreage allotments were not compulsory in themselves, but they furnished the basis for setting up marketing quotas, and farmers who produced and sold the basic products in amounts exceeding their quotas could be made to pay penalties on the excess. The national acreage allotment for each commodity was made by the Secretary of Agriculture, and was the acreage estimated to be necessary to produce a normal year's requirements for consumption and export, plus an arbitrary amount for stocks, minus the amount carried over from the preceding year. The total acreage allotment was then divided among states, counties, and individual farms. Farmers who stayed within their allotted acreages received cash benefits from the government, in addition to the benefits of the soil conservation program.

According to the Act of 1938, there was "overproduction" whenever the supply (crop and carry-over) of a basic product exceeded "normal" by more than a stated percentage. For cotton, overproduction was any amount in excess of 107 per cent of normal; for wheat, 135 per cent; for corn and rice, 110 per cent; and for tobacco, 105 per cent. "Normal" in each case was the amount estimated to be necessary for a year's consumption and exports. When there was overproduction of any of the basic commodities, the Secretary of Agriculture could set up compulsory marketing quotas, but such quotas did not become effective until approved by two-thirds of the producing farmers voting in a referendum. The total

marketing quota was prorated to states, counties, and individual farms in proportion to the normal yields of their acreage. For the individual farmer, the marketing quota was the amount of a commodity that he could sell without incurring penalty. Basic commodities produced in excess of marketing quotas could not be fed to livestock for the market, given away, or traded for other economic goods. To avoid penalties, they had to be stored on the farms or in warehouses.

The Act of 1938 provided for loans to farmers to enable them to carry adequate reserves of basic products as a safeguard against lean years. The Commodity Credit Corporation was required to make loans on cotton, corn, and wheat, under conditions laid down in the Act, and could lend on any agricultural commodity. No loans could be made on cotton, corn, wheat, or rice in years in which marketing quotas had been declared necessary but had been rejected by vote of the farmers concerned. In general, loans were to be made whenever the price of a basic commodity fell below a specified percentage of parity, or when the crop estimate exceeded a normal year's consumption and exports. The parity price for a good, as under the original Agricultural Adjustment Act, was defined as one which would give that commodity a purchasing power (in terms of goods that farmers buy) equal to its purchasing power in the base period which, for most of the goods, was the period from 1909 to 1914. Minimum loan rates were set by the Act at 52 per cent of parity prices. Farmers who did not cooperate in the quota program could receive loans only in years in which marketing quotas were in effect, only on portions of their crops whose sale would not be subject to penalties under the marketing quotas, and only at rates which were 60 per cent of those extended to cooperating producers.

EVALUATION OF THE AGRICULTURAL ADJUSTMENT PROGRAM

The Agricultural Adjustment Act of 1938 had been in effect only a relatively short time when World War II broke out, and long before that conflict was over the main farm problem became one of securing adequate agricultural production instead of one of restraining production and avoiding large surpluses of basic farm products. Before examining the status of agriculture in the war period and its prospects for the future, it will be desirable to evaluate the Agricultural Adjustment Program as it operated from 1933 to 1940.

Gains for Farmers. The Agricultural Adjustment Program was successful in securing reductions in the acreages devoted to the basic crops and, with the help of other factors, such as weather conditions, it raised the prices received by farmers for these products. In 1932, as we have noted, prices received by farmers stood at 68 (1909-14=100) while prices paid

by farmers were at 124. By 1937, prices received by farmers had advanced to 122, while prices paid by farmers had increased only to 133.¹⁵ The ratio between these indexes was then 92, a level which had not been exceeded since 1920. At the same time, income from agriculture, which had amounted to only \$3,040,000,000 in 1932, increased to \$6,802,000,000 in 1937.¹⁶ Both agricultural prices and income, however, were considerably lower from 1938 to 1940 than in 1937.

The Prevention of Production Adjustments. In spite of these gains for American farmers, the operation of the Agricultural Adjustment Program was subject to a number of serious criticisms, several of which related to the attempt to secure and maintain rigid parity prices for farm products. The base period for parity prices goes back to the years 1909 to 1914 for a number of products, and the maintenance of parity prices disregards changes in relative costs of production which have occurred since that time and tends to prevent needed readjustments of agricultural production. For example, 89 man-hours were required to produce 100 bushels of wheat in the base period, and only 41 man-hours in the 1934-36 period. Again, the use of hybrid varieties of corn increased yields by 15 to 20 per cent with only a small increase in costs.¹⁷ On the other hand, increases have occurred in the labor requirements and cost of production for such things as vegetables.

In such a situation, parity prices treat the growers of some products much better than the growers of others. Even under parity prices, it becomes difficult to get adequate production of some crops whose costs have increased and, unless production control is very severe, it is difficult to hold down the production of others. If the government is to maintain prices for agricultural products, these prices should be kept flexible, so that they will reflect the changes which occur in relative costs of production and will not interfere with necessary adjustments of production.

If the production of some basic crop is to be curtailed, it would seem desirable to let low-cost producers turn out as much as usual, while eliminating certain high-cost producers entirely. However, the Agricultural Adjustment Program sought curtailed production and parity prices through percentage reductions in acreage on the part of all growers of a crop who were willing to participate in the Program. This meant, quite simply, that high-cost areas were kept in production at the same time that production was being curtailed in lower-cost areas, and the Program prevented desirable basic adjustments in production from taking place.

Exports and the A.A.A. While the Agricultural Adjustment Program did not succeed immediately in raising the prices of farm products to a

¹⁵ National Industrial Conference Board, *The Economic Almanac for 1945-46*, p. 170.

¹⁶ *Ibid.*, p. 168.

¹⁷ Board of Governors of the Federal Reserve System, *Agricultural Adjustment and Income*, p. 14.

parity level, a considerable increase in these prices did occur under its auspices and the prices rose to a level well above those prevailing in the rest of the world. This situation resulted in a low level of agricultural exports, and indirectly operated to restrain exports of manufactured goods which required the use of these high-priced farm products as raw materials. Moreover, any attempt to sell farm products abroad at prices lower than those prevailing in the United States was likely to be regarded as "dumping" from the point of view of other countries and to lead to antagonism and retaliation on their part. Thus the operation of the Agricultural Adjustment Program seemed to be in direct conflict with the Roosevelt administration's objective of producing an increase in the volume of our international trade. The disappearance of American farm products from world markets also produced some increases in world prices of the products, and tended to encourage the expansion of production in other countries.

This problem is likely to be troublesome in the present post-war period. For example, "Brazilian cotton Type 5 at the São Paulo market averaged 0.53 cents above the American Middling 15-16 at New Orleans from 1923 to 1929. From December, 1941, to July, 1945, the American domestic price has exceeded the Brazilian by from 6 to almost 12 cents per pound; a number of countries have shifted their purchases from American to Brazilian cotton partly because of relative prices and partly because of shortages of dollar exchange. While the United States was reducing the cotton acreage, Brazil almost tripled her acreage from the 1930-34 average of 2.4 million acres to 6.7 million in 1940."¹⁸

The Efficiency of Production Control. The success and cost of a policy of maintaining rigid parity prices for farm products depend to a great extent upon the efficiency of methods of controlling farm production, and the Agricultural Adjustment Program was not very successful in this respect. The lowest point reached by the index of the physical volume of farm production (1909-14 base) was 111 in 1935, and the index reached a new high point of 128 in 1937.¹⁹ The Program succeeded in reducing the acreages devoted to the basic products, but production remained high and later increased because of increased yield per acre. In the case of corn, for example, an average planting of 108 million acres was maintained from 1931 to 1933 and production averaged 2.6 billion bushels. In the period from 1939 to 1941, the area devoted to corn averaged only 87 million acres under the A.A.A., but production still averaged 2.6 billion bushels.²⁰ The greatly increased yield per acre resulted from the use of hybrid varieties of corn and improved crop rotation.

In order to curtail the *production* of a given crop by a certain desired

¹⁸ *Ibid.*, pp. 15-16.

¹⁹ *Ibid.*, pp. 3, 12.

²⁰ *Ibid.*, p. 16.

percentage, it is necessary to achieve a much greater percentage reduction in *acreage*, both because the land taken out of production will be the poorest land and because land used for producing the controlled crop is likely to increase in productivity as it is rotated between the controlled crop and other soil-building crops. The A.A.A. had serious difficulties, therefore, in controlling production when only a few basic crops were involved. The problem would be much worse if almost all phases of farm production had to be controlled. Farmers do not like to have their land and other resources lie idle. If they reduce their production of some crops, they are likely to increase the production of others. If the production of almost all farm products were controlled, there would be almost no place for the farmer to turn with any acres dropped from the production of a given crop; and it might be very difficult to maintain farmer participation in and compliance with the governmental control program.

Income and Standards of Living. The Agricultural Adjustment Program, in the period from 1933 to 1940, was not especially effective in increasing the income and efficiency of low-income farmers. In the year from July 1, 1935, to June 30, 1936, a year between the great depression and the prosperous war period, almost one-fourth of American farm families received less than \$500 of income, about 38 per cent received less than \$750, and only 8 per cent received more than \$2500.²¹ These figures included the rental value of the farm homes and the market value of farm products consumed on the farms. In other occupations in the economic system, only 16 per cent of the workers received less than \$750 in the year in question, and 17 per cent received over \$2500.²¹ Even in 1942, only 18 per cent of total agricultural income went to the 50 per cent of the farmers with lowest incomes.²²

Progress Toward the Controlled Economy. The Agricultural Adjustment Program tended to bring an ever-increasing number of farm products under price and production control. Starting with a few basic products, the Program spread to others because the farmers, as they reduced the acreage devoted to the controlled crops, planted their land to other crops and created "overproduction," surpluses, and low prices for these other products. It seemed that there would be no logical end to this process short of complete and strict governmental control over agricultural production in general. Indeed, some people feared that the controls would spread to manufactured products made from basic farm materials, to other products competing with these manufactured goods, and so on, until eventually a planned and controlled economy of socialism would be the result. Without altogether accepting this point of view and without any intention of arguing the relative merits of capitalism and socialism at this time, we may yet conclude that the development of stringent govern-

²¹ *Ibid.*, p. 4.

²² *Ibid.*, p. 18.

mental control over agricultural production and prices would be a step in the direction of a controlled economy of some type or other.

The Permanence of the Farm Program. One of the most serious criticisms of the farm program was the charge that the A.A.A., once instituted, could not be given up and would become a permanent policy. It can scarcely be stated too emphatically that the Agricultural Adjustment Program was not desirable as a permanent solution of the farm problem in the United States, because it did nothing to reduce the number of farmers in the country or the amount of land available for the production of the basic crops. When the demand for a manufactured product suffers a permanent decline, the industry reacts by producing fewer units than formerly and by allowing a part of its productive facilities to lie idle. Eventually, however, the industry tends to readjust its productive capacity to the changed conditions of demand, and only then can it be said to have met the problem created by the decline in demand. The Agricultural Adjustment Program led only to the first of these steps; that is, it induced the farmers to produce less than before and to allow part of their productive agents to remain unused. It did not lead to the apparently necessary curtailment of the land, labor, and capital employed in the agricultural industry.

In the period under discussion, 1933-40, A.A.A. payments to cotton farmers amounted to 1.3 billion dollars, which was over 25 per cent of the value of the cotton lint produced in this country during the period.²³ Even if we admit that doing nothing about prices and production would have been too slow and painful a method of forcing high-cost farmers to turn to some other type of farming, it is still reasonable to think that the government's money could have been spent in a more useful way over the period. That is, if the 1.3 billion dollars had been spent in adjusting the size of farms in the cotton-raising area, training the farmers to carry on a diversified type of agriculture, and lending them the funds necessary to effect the transformation, we might well have been closer to a permanent solution of the cotton section of the farm problem by 1940.

Despite the fact that many if not most people felt that the A.A.A. should be merely a temporary program, there was always a possibility that it might be continued indefinitely. Once the government had established the practice of paying cash benefits to the farmers, it threatened to be a most difficult matter, from a political point of view, to discontinue these benefits when it became economically desirable to do so. Hence, we were in some danger of seeing the farm program remain as an undesirable but permanent feature of our economic system, in much the same fashion that the protective tariff, created more than a century ago to protect infant industries, has remained to plague us long after some of these infants have become industrial giants.

²³ *Ibid.*, p. 15.

THE STATUS OF AGRICULTURE DURING WORLD WAR II

Demand and Production. In the period of World War II, American agriculture was faced with an unprecedented demand for its products for use at home and abroad, and it responded nobly to this demand. In fact, agricultural production increased more rapidly during this war than during World War I. The index of agricultural production (1935-39=100) rose rapidly from 110 in 1940 to 136 in 1944 and 132 in 1945.²⁴ These results were achieved in spite of the fact that there was a severe shortage of new agricultural machinery and equipment, and that much labor was drawn from agriculture into other branches of production and into the armed forces. We had large stocks of grain on hand at the beginning of the war period, which made possible a rapid expansion in livestock production. Our farms were already so thoroughly mechanized that crop acreages could be expanded or at least maintained in the face of shortages of new equipment and labor; and unusually favorable weather conditions also played a part in increasing production.

Prices and Income. The prices of agricultural products were brought under price control at a later date than the prices of most other things, and rose rapidly during part of the war period. In 1942, the prices *received* by farmers became higher than the prices *paid* by them, for the first time since 1920. In 1944, the index of prices received was 195, and that for prices paid was 170, while in 1945 these indexes were 202 and 174,²⁵ respectively. This latter relationship meant that the farmers, in 1945, by giving up products that were worth \$1.00 in the base period (1909-14), could secure products valued at \$1.16 in the base period. With both farm production and prices rising, the incomes of farmers increased greatly in the war period. The net income from agriculture, which had been \$6,521,000,000 in 1940, rose to \$16,105,000,000 in 1944, \$16,831,000,000 in 1945, and \$17,927,000,000 in 1946.²⁶ These latter amounts were new all-time records.

Production Controls. In the war period, the agricultural problem was to secure enough farm products rather than to restrain production and prevent surpluses, so the various controls provided by the Act of 1938 could be largely relaxed. However, payments to farmers under the Soil Conservation and Domestic Allotment Act of 1936 went forward as usual during the war period. In addition, it was thought necessary to take certain steps to stimulate agricultural production. The most important of these was a series of Acts which placed price floors under agricultural

²⁴ *The Economic Almanac for 1946-47*, p. 119.

²⁵ *Ibid.*, p. 119.

²⁶ Bureau of Agricultural Economics, Department of Agriculture, estimates of November 6, 1946.

products and promised a continuance of parity price guaranties into the post-war period. Prices of cotton were to be guaranteed at 92½ per cent of parity, and those of wheat, corn, tobacco, peanuts, and rice at 90 per cent of parity, for two years after January 1 of the year following the official declaration of the end of hostilities, or, as it turned out, until December 31, 1948. A guaranty of prices at 90 per cent of parity for the same period after the close of hostilities was extended to a number of agricultural products not included in the above list of basic products, provided funds were available for the purpose when the time came.

FUTURE AGRICULTURAL POLICY

From the point of view of our needs during World War II, it was probably fortunate that a genuine reduction in the productive capacity of agriculture was not achieved during the 1930's, for we needed, at least temporarily, all the products which the industry could turn out. However, it would not be sound economic policy to keep agricultural capacity at an excessive level for decades at a time on the chance that we might need all of this capacity if a major war occurred. Since the productive capacity of agriculture was regarded as excessive even before World War II and since the war period brought great increases in agricultural production and added many acres to the area under cultivation, there is serious question as to what the status of American agriculture will be in the post-war period. Are we not likely to be troubled again with "overproduction" and growing agricultural surpluses, falling prices for farm products, and declining agricultural income?

Full Employment and Economic Stability. Under certain conditions it is possible that there will be no agricultural problem in the United States in the post-war period. One thing which would help greatly in preventing the development of such a problem would be the maintenance of a high and stable level of production, employment, and income in the economic system as a whole. As we have seen, agricultural production in general is remarkably stable through good years and bad, and has changed sharply only in wartime. Hence, agricultural production is not an important factor in producing booms and depressions in general business, though agriculture suffers heavily as a result of instability in the economic system as a whole. If the general level of economic activity in the country could be kept high and stable, there would be little need for special aids to agriculture. Consequently, agriculture must regard with great interest any plans which are made for stabilizing production and employment in the United States at a high level.

Agricultural Exports. Another factor which would be helpful is the development of export markets for farm products. During the war, American agriculture was producing for both this and other countries, and our

exports of farm products were abnormally large. It seems clear that, in the post-war period, agricultural production is likely to exceed the needs of the domestic market by a considerable amount. Our imports of agricultural products may increase to the pre-war level, individuals returning to civilian life from the armed forces may consume less food than formerly, manufactured goods will be available in larger quantities than during the war period, and people may not care to spend as great a proportion of their income on food as they did during the war years. Therefore, the need for agricultural exports will be great if farming is to operate at capacity. If such organizations as the International Monetary Fund, the International Bank for Reconstruction and Development, and the Economic and Social Council of the United Nations work successfully and produce a greatly enlarged volume of international trade in the post-war period, the result is likely to be highly beneficial for American agriculture.

The Maintenance of Adequate Diets. Agriculture would also profit from the attainment and maintenance of an adequate diet for the people of the country as a whole. It would be best, of course, if production, employment, and income could be kept at such a high level that the people could provide themselves with adequate diets through the purchase of farm products. In the absence of such a happy situation, the subsidization of food consumption for low-income families and the improvement of their diet would not only benefit national health and efficiency but also help to dispose of agricultural surpluses and raise the prices of agricultural products. Too much should not be expected from this source, however. It has been estimated that the provision of adequate diets for all low-income families in the country would absorb the production of only about five million acres of farm land over and above the acreage which would otherwise be necessary.

Monopolies and Agriculture. It seems, finally, that the status of agriculture in the post-war period will depend to some extent upon the success which attends our efforts to deal with the problem of monopolies and trusts. In the past, our farmers have been handicapped by having to sell their products in a highly competitive market while doing most of their buying in a market which was to a considerable degree controlled by monopolists, oligopolists, and monopolistic competitors. In the long period of good business prior to 1929, many of our manufacturing industries, being monopolistic or semi-monopolistic in character, were able to maintain stable prices in the face of improved methods of production and falling costs of production. Quite apart from the effect of this situation in producing the great depression, it made it difficult, if not impossible, for our farmers to get prices for their products which would enable them to share in the general prosperity of business.

Later, after the great depression broke in 1929, these monopolistic and semi-monopolistic industries were still able to maintain prices to a very

considerable extent. This they did by restricting production sharply, by turning off employees, and by reducing their purchases of raw materials. This course of action made it difficult for farmers to sell their raw materials and foodstuffs, and the uncontrolled prices of farm products had to bear the brunt of the depression liquidation. Thus, in a sense, the farmers under the Agricultural Adjustment Program were only giving our industrialists a taste of their own medicine, with the assistance of the government. The farm problem would have been much less severe in the past if competitive conditions had been maintained in industry, and it would be much less likely to reappear in the post-war period if the monopoly problem could be solved.

Forward Price Floors. While a happy combination of circumstances might forestall the reappearance of the farm problem in the post-war period, we cannot count on this result being attained. If worst comes to worst and general economic conditions remain unstable, agricultural exports decline to the pre-war level, agricultural surpluses reappear, and farm prices and income threaten to fall disastrously, governmental aid to agriculture will again be necessary. What form should it take? The most reasonable suggestion we have encountered is the establishment of forward price floors.²⁷

According to this proposal, an Agricultural Price Board (to be created by act of Congress) would set up price floors extending over one production period for the various farm products. Such floors would protect farmers against collapsing prices of farm products in any one year, and would enable them to plan production intelligently on the basis of foreknowledge of the relative prices of various products. The Board would try to establish its price floor for each commodity at such a level that market demand for and market supply of the good would be in equilibrium at that price.

In order to reach this objective and to free the Board from pressure from special interests in agriculture, the Board's freedom of action would be limited by a number of regulations. In the case of export commodities, the price floors established by the Board should not be allowed to exceed the world prices expected for the commodities during the forthcoming year. In the case of nonperishable products, the Board should be required to lower the price floor for any commodity in the year to come when the carry-over exceeded an established "normal" by 10 per cent, and to raise the price floor when the carry-over was 10 per cent below "normal." In the case of perishable products, the Board should be required to lower the price floor for the coming year whenever it had been necessary for the government to purchase a farm product in the open market and resell it at a loss. Finally, the price floor for any com-

²⁷ As discussed in Board of Governors of the Federal Reserve System, *Agricultural Adjustment and Income*, pp. 28-31.

modity should be raised in the coming year if its price exceeded the existing floor by 10 per cent.²⁸ In all cases, the prices of farm products would be kept from falling through the floors by means of the power of the Board to have the Commodity Credit Corporation purchase the products and either store or resell them at a loss. Since this action would necessitate lower floors in the following year, the program would not result in the maintenance of rigid prices for farm products or become excessively costly.

The program of using forward price floors would be superior in several respects to the continued use of a program for maintaining rigid parity prices based on a distant historical period. First, while fears of collapsing prices of farm products in any given year would be eliminated, the prices of individual farm products would be completely flexible in the long run. That is, even though price floors were used from year to year, the prices of some individual farm products could fall while those of others rose, as the costs of production changed in the various fields of agricultural production. Second, the program of forward price floors would not require direct and severe control of agricultural production by the federal government. Third, the program could be modified to provide for the special conditions prevailing in times of depression without producing rigidities which would later become difficult to eliminate.

In this last connection, the Board could be directed not to permit the price of any agricultural commodity to fall in a given year by more than 20 per cent of the average price in the preceding three years. Under this provision, five years of depression would be necessary to reduce the price of a farm product to 54 per cent of its pre-depression level. It is estimated that, if this system had been in operation, the prices of agricultural products would have fallen by only 20 per cent, instead of 40 per cent, between 1920 and 1921, and by 32 per cent, instead of about 55 per cent, between 1929 and 1932.²⁹ The decline in the prices of farm products during a depression would be controlled through purchases of the products by the Commodity Credit Corporation for resale at a loss.

This method of helping the farmers in depression periods would keep agriculture from bearing more than its share of the burden of depression. It would maintain the farmer's income through the prices received for his products instead of by direct subsidies or "benefit" payments. It would be relatively simple in operation and would go into action automatically when needed. Its cost could be financed in a way which would not curtail purchasing power elsewhere in the economy. It would permit lower prices of farm products to ultimate consumers and would not curtail production in non-agricultural fields. Finally, it would permit

²⁸ These suggested regulations are from *ibid.*, p. 29.

²⁹ *Ibid.*, p. 30.

the prices of individual farm products to remain flexible in relation to one another.³⁰

Other Policies. While the system of forward price floors was being applied to the main agricultural problem in the post-war period, other governmental agricultural policies might also be desirable. The soil conservation program should be continued, but it should be based on the physical necessities of soil conservation and not be a device, as in the past, for helping to control agricultural production. The production of individual farm commodities should depend on demand and supply (cost) situations, and the soil conservation program should be adjusted to the crop pattern which results. Crop insurance, to protect the farmer against the uncontrollable risks of his industry, began in a small way under the Agricultural Adjustment Act of 1938, was later repealed, and was reenacted in 1945. This system might well be extended in the post-war period. Finally, some measures for the reduction of agricultural poverty might be tried, for this problem remains even in years of generally high farm prices and income. The measures might include enlarging the farms used by low-income farmers, training these farmers for greater efficiency, making capital funds available to them, and possibly training some of them, who must leave agriculture, for jobs in other fields.

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1. Indicate the importance of agriculture in our economic system.
 2. In what sense has the problem of agriculture been one of overproduction? Explain.
 3. Why did American agriculture expand production during and immediately after World War I? Explain.
 4. What happened to agricultural prices and income during World War I?
 5. Discuss the demand and supply conditions which existed for agricultural products during the 1920's.
 6. How did agriculture fare in the great depression following 1929?
 7. How did the behavior of agricultural output and prices in the great depression differ from that of output and prices in certain manufacturing industries?
 8. Explain fully what is meant by "the insensitiveness of farming."
 9. "The burden of fixed costs to the farmer grew heavier during the depression." Explain.
 10. What is the nature of the problem of soil erosion? How is this problem related to the main agricultural problem?
 11. Were American farmers benefited by the high tariff rates placed on imports of farm products in 1922? Explain.
 12. How were the equalization fee and debenture plans expected to help the farmers? Explain.
 13. Discuss the Federal Farm Board experiment.
 14. Outline the farm credit policies of the Roosevelt administration.

³⁰ *Ibid.*, pp. 29, 30.

15. What was the relation of farm credit policies to the main agricultural problem? Explain.
16. What was the purpose of the Agricultural Adjustment Act of 1933? Explain.
17. What were the principal methods by which this purpose was to be accomplished? Explain.
18. Explain the dual purpose of the Soil Conservation and Domestic Allotment Act of 1936.
19. Why was additional farm legislation passed in 1938? Compare the provisions of the Agricultural Adjustment Act of 1938 with those of the Act of 1933.
20. Indicate the extent to which the status of agriculture improved under the Agricultural Adjustment Program from 1933 to 1940.
21. Why is it said that the Agricultural Adjustment Program prevented necessary or desirable adjustments of agricultural production? Explain.
22. How were agricultural exports affected by the Agricultural Adjustment Program? Explain.
23. Was the Agricultural Adjustment Program successful in reducing agricultural production? Explain.
24. Did the Agricultural Adjustment Program succeed in raising the income and efficiency of low-income farmers?
25. Was there danger that the Agricultural Adjustment Program might lead the United States to complete socialism? Explain.
26. "The greatest danger of the Agricultural Adjustment Program was that it would become a permanent program even though it did not furnish a satisfactory long-run solution for the main farm problem." Explain.
27. "The period of World War II was one of great prosperity for American agriculture." Explain.
28. Is it likely that the main farm problem of the 1930's may reappear in the post-war period?
29. What are the conditions under which there might be no agricultural problem in the post-war period? Explain.
30. If governmental assistance for agriculture is necessary in the post-war period, what form should it take?
31. Discuss the ordinary operation of a program of forward price floors for agricultural products.
32. What are the advantages of such a program as compared with one for the maintenance of rigid parity prices? Explain.
33. How could a program of forward price floors be used to control the decline of agricultural prices and income in periods of depression? Explain.
34. What would be the advantages of this program for aiding agriculture in depression periods?
35. What types of agricultural assistance might the government provide in the post-war period besides the operation of a system of forward price floors? Explain.

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Transportation

SPECIALIZATION AND LARGE-SCALE PRODUCTION ARE FUNDAMENTAL characteristics of the present economic order. An individual does not attempt to produce for himself all of the many economic goods he needs for the satisfaction of his wants, but instead specializes in a single task or a limited number of tasks, trusting that he may obtain, through the process of exchange, the other economic goods that he desires—goods which have themselves been produced for the most part on a large scale by other groups of specialists. Large-scale production brings with it many economies, but we often hear it said that the extent to which large-scale production (and its accompanying principle of division of labor) can be applied is largely limited by the size of the market for the products. The extent of the market is in turn greatly dependent upon the adequacy and efficiency of the means of transportation which have been or can be developed.

The Importance of the Railroads. In the United States, as in other industrially advanced countries, the railroad has for many years been the most important single means of transportation. In 1945, there were 226,696 miles of railroads in this country, counting only the first main track between any two points. If second, third, fourth, and other trackage is included in the total, the figure becomes 376,772 miles. The total reported property investment in our railroads amounted to almost 27 billion dollars in 1945, and the railroads carried 68.23 per cent of all the freight, express, and mail transported in the United States (in terms of ton-miles), as compared with 14.10 per cent for inland water carriers, 12.17 per cent for pipe lines, 5.49 per cent for motor carriers, and 0.01 of 1 per cent for airways.

In 1945, the Class I railroads (which means every railroad that has a net operating revenue of at least one million dollars per year) employed 1,419,505 workers on the average, carried revenue freight amounting to 684,148,000,000 ton-miles, and provided passenger service to the extent of 91,826,000,000 passenger miles.¹ Estimates for 1946 indicate that the Class I railroads carried revenue freight amounting to 590 billion ton-miles and furnished passenger service to the extent of 65 billion passenger miles. They employed 1,381,977 workers in November, 1946.²

¹ These statistics are from the *Sixtieth Annual Report of the Interstate Commerce Commission*, Washington, Government Printing Office, 1947, pp. 8, 137-141.

² *What's New?* Washington, Association of American Railroads, January, 1947, pp. 9, 32.

Clearly, it is important to everyone that an industry of such magnitude and vital significance in our economic system should be kept strong and vigorous, and capable of rendering cheap, efficient service. And yet, for many years between 1929 and the beginning of World War II, our railroads experienced great difficulty in earning sufficient net revenue to enable them to maintain existing plant and equipment satisfactorily and to attract enough new funds to make possible the construction projects and betterments which were necessary for continued efficient operation. Indeed, many roads failed to meet their obligations and went into receivership, and our railroads as a whole operated at a net deficit, after paying interest charges, in certain years. How were the railroads brought to such a condition? What can be done to improve their lot? How will they fare now that the prosperous wartime period is over? These are questions which we examine in the present chapter; and in doing so, we shall find it necessary to inquire into the affairs of the other forms of transportation in the United States. Our first task, however, is to consider the chief economic characteristics of the railroads.

ECONOMIC CHARACTERISTICS OF THE RAILROADS

The railroads furnish an outstanding example of an industry which tends naturally to become a monopoly. That is, the railroad industry is one in which free competition is wasteful, if not actually ruinous, and in which maximum efficiency and lowest costs of production can be obtained only when competition is eliminated or at least greatly restricted.

Increasing Returns in Railroading. One of the characteristics of railroads upon which the tendency to monopoly depends is what is usually called increasing returns. A railroad is a business that requires a heavy original investment. The interest upon borrowed capital, together with other fixed charges such as the rentals of leased lines, taxes, and amounts to be set aside for sinking funds to provide for maturing obligations, make up an important part of total costs of transportation, and a part which remains the same whether the railroad runs at full capacity or at only part capacity. As the traffic handled by a railroad increases, the operating costs increase, of course, but total costs do not increase in proportion to the increase in traffic, because of the large element of fixed costs. It follows, then, that as a railroad comes to be operated at full capacity, instead of at half capacity, the business that is handled doubles but the costs of transportation do not double, and, if the rates charged are assumed to be relatively constant, net earnings of the railroad increase.

There is nothing mysterious about the tendency described in the preceding paragraph, nor is the tendency peculiar to the railroad industry. Any industry which has a considerable amount of plant and equipment

will find that it is more economical to run at or near full capacity, rather than at some lower level. Nor should one be led to jump to the conclusion that the railroad is necessarily one of those industries which are characterized by economists as "industries of decreasing costs." The concept of decreasing costs, as usually described in connection with price determination in the long run, is concerned with the average cost per unit of product which the industry would experience as it adjusted itself to different volumes of production *through changing the amount of plant and equipment* and other productive factors devoted to production. Thus, an industry which would have a lower average cost of production per unit when its productive capacity and amount of plant and equipment used were large than when capacity and amount of plant and equipment were small, is to be described as an industry of decreasing costs. But, with either a large or a small amount of plant and equipment, any concern in the industry would find it more efficient to run at full than at part capacity, and would experience increasing returns in the sense that a railroad may experience them. The concept of decreasing costs, therefore, refers to the experience of an industry as a whole as it changes its productive capacity, while the concept of increasing returns as applied to the railroads refers to the experience of one concern in an industry as it more or less completely utilizes a given amount of productive equipment. It may be that the railroad fits into both classes, but the one does not follow from the other.

However, the tendency to increasing returns, as described above, is of particular importance in railroading, because it is more pronounced in the railroad business than in most other lines of production. As a result of this tendency, any gain in the volume of business handled is welcomed by a railroad, while any loss of traffic is a serious matter; and consequently, under a system of competitive rates, a wild struggle for traffic usually ensues.

Joint Costs in Railroading. A second important characteristic of the railroad business is that it operates under conditions akin to those of "joint costs." A railroad, of course, ordinarily furnishes only a single service, transportation; but a given train often carries a wide variety of articles—some of high and others of low value; some in carload lots, others in less than carload lots; some for long distances and others for short distances. The result is that the exact cost of a given unit of transportation cannot be discovered. What part of the total cost of operating a train for an 800-mile run, for example, should be charged to a ton of coal which is being carried for 63 miles in conjunction with 80 or 90 cars full of other commodities, of different values per pound, being carried for different distances, in lots of different sizes? It follows, then, that the rates charged by railroads for their services in connection with any particular lot of goods must be more or less arbitrary, being based

upon a notion as to "what the traffic will bear" rather than upon actual unit cost of production of the service.

We have already shown that the tendency to increasing returns in railroading appears most clearly when a larger volume of traffic than formerly handled is carried at approximately constant rates. Under conditions of competition, however, it does not take a railroad long to discover that it will be wise, at least from the short-run point of view, to add to its volume of traffic even if it has to reduce rates to attract the new business. As long as any new traffic will bring in enough revenue to cover the special costs of handling it, and in addition contribute something toward the costs which would persist whether or not the new business is taken on, it is profitable for a railroad to go after new traffic. Unfortunately, however, rate-cutting does not usually stop with the first cut. Unless the road with the increasing traffic has really attracted some business which would not otherwise have been carried, it has increased its own traffic at the expense of some other railroad or railroads, and one cut in rates usually leads to another, until business is being carried at rates insufficient to cover even the operating costs, not to mention the fixed costs. This process of competitive rate-cutting has often been described as "cut-throat competition."

THE DEVELOPMENT OF RAILROAD REGULATION

The American Railroad Industry Under Competition. In spite of the fact that the railroad industry is one in which competition tends to be wasteful, the construction and operation of railroads in this country went on under conditions of practically unrestricted competition for more than fifty years. Railroads were built far in advance of the needs of the territories to be served by them, and the pressure upon the railroads, with their large unused capacities, to go out and get business, at whatever cost, was irresistible. The result was severe and destructive competition, and rate wars were of frequent occurrence. In addition, certain other pernicious practices, such as local and personal discrimination, sprang up.

Local Discrimination. The most important type of local discrimination was that in which a given shipment of goods would be carried a long distance at a lower rate than that charged for carrying it a shorter distance. For example, as between New York City and Chicago, a low rate on a given commodity would be likely to prevail because of competition among several railroads operating between these two great terminals, while a railroad would charge a higher rate on this same good as between New York and some intermediate point at which competition with other railroads did not exist. Sometimes the rate charged to the intermediate point was the sum of the through rate from New York to Chicago

and the local rate from Chicago back to the intermediate point. So long as the through or competitive business paid for the special costs of handling it, and contributed something to the other transportation costs, it was profitable for the railroad to take it. Moreover, the rates to the local or intermediate points would not usually have been lowered if the railroad had given up the competitive business, for the local traffic would then have had to bear both the operating costs and the fixed costs in their entirety, whereas the through or competitive traffic contributed something toward the fixed costs.

Personal Discrimination. The pressure to get business, when railroads had unused capacities, manifested itself also in personal discrimination, which means charging one person more than another for substantially the same service, or giving one person more service than another while charging the two the same rate. Favors of this sort were granted by means of a great many devices which are too numerous to note here, and were accorded chiefly to the more powerful shippers, that is, to those who had the largest quantities of commodities to be transported. The effect of widespread personal discrimination is to reduce the railroads from the status of common carriers to that of contract carriers, or carriers which undertake each particular bit of transportation service on the basis of a separate agreement as to service and rate.

Attempts to Restrain Competition. Groups of railroads in different parts of the country at times became mindful of the ruinous nature of competition, and entered into agreements among themselves with the intent of restricting competitive activity. At times the subject of the agreements was rates, and the railroads would promise to maintain a given rate structure for a certain period of time. At other times, pooling agreements were entered into, and the railroads undertook to pool their traffic or the earnings from traffic, and to divide the business or the profits from it according to some prearranged ratio. While agreements of this sort were not punishable by law prior to 1887, they were nevertheless unenforceable at law, and there was every incentive for the railroads to attempt at times to evade the provisions of the agreements. As a result, most of these agreements did not enjoy long life.

Early Railroad Regulation. The disastrous effect of competition on the railroads, the complaints of shippers concerning local and personal discrimination, the fear of monopoly power under rate and traffic agreements, the speculation and fraud which pervaded railroad finance, and the attitude of railroad officials and executives toward the public, were some of the causes which influenced Congress to begin a long career of railroad regulation by passing, in 1887, the Act to Regulate Commerce. The legislation pertaining to the railroads has been constantly changing since that time, but it was only after almost thirty-five years of regulation that anything like a constructive approach to the railroad problem was

adopted in our railroad legislation. It will be impossible in this chapter to analyze in any detail the provisions of the various Acts which have been passed in regulating the railroads, but it is essential to an understanding of the railroad problem of today that the chief defects of the early railroad legislation be pointed out. The two principal defects were closely related.

The Negative Character of Early Legislation. One defect of our regulatory scheme prior to the last twenty-five years was that it concerned itself chiefly with provisions intended to keep the railroads within bounds, and to prevent the exploitation of the public through unreasonable transportation charges and arbitrary maladjustments in rate relationships. The principal aim of regulation was to wipe out railroad abuses, and consequently most of the provisions of the legislation took the form of prohibitions. For example, the railroads were warned that they must not discriminate between persons or companies, must not charge more for a short haul than a long haul unless granted specific permission, and must not enter into agreements for the pooling of traffic or earnings. From a positive point of view, not much was said as to what the rates should be. Our legislation did provide, of course, that rates should be "just and reasonable," but no significant meaning was given to these terms prior to the legislation passed in 1920. In short, the early railroad legislation treated in detail the things that the railroads should not do, but paid little or no attention to what they should do if the country was to have an efficient national transportation system. The items which were omitted from the regulation, rather than those which were included, seem to us to constitute the primary purpose of regulation.

The Policy of Enforced Competition. Though attempts were made, as was stated above, to eliminate some of the worst abuses which sprang up under competition, there was a continued insistence on competition as the condition under which the development of our railroad system should go on. "The anti-pooling clause of the Act to Regulate Commerce, and the prohibitions of the anti-trust laws as judicially applied to the railroads, created serious practical obstacles to the development of responsible relations between the carriers, to the elimination of personal preferences, to the stabilization of competitive conditions, to the achievement of such economies as coordination might render possible, and to the full and flexible utilization of the available plant and equipment. This condemnation of cooperative effort among the carriers through insistence upon the rigorous enforcement of competition, despite the subversive tendencies of such competition in the direction of rate fluctuations and discriminatory practices, and despite the difficulties of maintaining uniform charges among competitors of strikingly unequal strength, was but a reflection of the primary emphasis of the regulatory scheme upon restrain-

ing the potential overreaching of quasi-monopolistic power rather than upon the provision of a satisfactory system of transportation."³

The Railroads and the First World War. Because of the nature of our railroad legislation, its application brought results which were, in many respects, undesirable. We spent too much time seeing to it that railroad rates were not unreasonable or discriminatory, and gave too little attention to the question of efficient railroad transportation and to providing the railroads with a rate system which would permit them to earn a sufficient amount to enable them to attract into the industry the capital so necessary for continued efficient operation. Consequently, when the heavy traffic of World War I began to make unparalleled demands upon our railroads, they were unable to respond adequately. During this great national emergency, the wastefulness of competition in railroading and the importance of having an efficient national system of transportation were fully realized for the first time.

In order to avoid the complete breakdown of our system of railroad transportation which seemed imminent, the federal government undertook to operate the railroads during the participation of the United States in World War I and for some time afterward. It was impossible, of course, to revolutionize the railroad industry and transform it instantly from a disorganized and inadequate competitive system into an efficient national organization, but many steps were taken during the period of federal operation which augured well for the future. The railroads were operated "as a national system of transportation, the common and national needs being in all instances held paramount to any actual or supposed corporate advantage."⁴ Locomotives and other rolling stock were pooled and used as necessity dictated, without regard to ownership. Shipments of freight were moved to their destinations by the most direct routes, regardless of the wishes of shippers as to routes or the amount of use made of any particular railroad in the process. Certain railroads were compelled to share their terminals with other railroads, and repair shops were used jointly. Cars were loaded heavily and the demurrage rates, or charges for leaving freight in the railroad cars in excess of a reasonable length of time, were increased to speed up car unloadings. Passenger service was cut down, and consolidated ticket offices were introduced. The purchase of materials and supplies was centralized, new equipment was standardized, expenses for advertising were reduced, and valuable uniform statistics were compiled.

Whatever conclusion may be reached as to the financial or operating success of the federal control of the railroads, we may at least be thankful for the new attitude toward the railroads which prevailed after the war.

³ I. L. Sharfman, *The Interstate Commerce Commission*, New York, Commonwealth Fund, 1931, part I, pp. 79, 80.

⁴ *Ibid.*, p. 155.

When the question of the terms upon which the railroads should be turned back to their private owners was being considered, many different plans were evolved, and yet they all agreed more or less completely in one particular. This was that the growing transportation needs of the country demanded, through some method or other, the welding together of the many independent railroads, each formerly following its own self-interest, into an efficient national system of transportation. It appeared that only by some plan of consolidation or cooperation could economies in operation be achieved, and the railroad plant and equipment be efficiently utilized, while difficulties of rate regulation were being overcome.

THE TRANSPORTATION ACT OF 1920

The attitude toward the railroads described above received its first legislative expression in the Transportation Act of 1920. Under this legislation, the control of the railroads subject to the provisions of law was continued in the hands of the Interstate Commerce Commission, the agency set up for that purpose in 1887 by the Act to Regulate Commerce. The Interstate Commerce Commission is made up of eleven members, appointed for terms of seven years each by the President of the United States with the consent of the Senate. The work of the Commission is expedited by the provision that it may organize itself into as many divisions, of not fewer than three members each, as may be necessary to handle its business, and that each division may act independently of the others, with its decisions subject to reconsideration by the Commission as a whole. The Act of 1920 placed upon the Interstate Commerce Commission some new responsibilities which were expected to be of great import in connection with the solution of the railroad problem. We shall consider the provisions of the law and their operation under four headings—railroad consolidation, rates, securities, and service.

Railroad Consolidation. In the first place, the Act of 1920 was noteworthy in that the traditional emphasis on competition in the railroad industry was discontinued. The Interstate Commerce Commission was ordered to prepare and adopt a plan for the consolidation of the many railroads of the United States into a limited number of systems. In drawing up such a plan, the Commission was asked to bear two considerations in mind: (1) To preserve as far as possible the existing conditions and channels of trade, and (2) to make each system such a combination of weak and strong roads that, when uniform rates were applied throughout the country, each system would make substantially the same rate of return upon the value of its property devoted to the transportation service as that made by the other railroad systems. Under the consolidation plan (whenever formulated by the Commission), it was made lawful for two or more railroads to consolidate their properties for ownership, manage-

ment, and operation, subject to two conditions: (1) The Commission must approve the proposed consolidation as being in line with its final consolidation plan, and (2) the par value of the bonds and stocks of the new consolidation must not exceed the value of the consolidated properties as determined by the Commission.

As a temporary expedient, pending the adoption of the final consolidation plan, it was provided that the Commission could permit one railroad to acquire control of another railroad or other railroads, by means of leases, stock purchases, or any method not involving actual consolidation. In addition, while agreements for the pooling of freight or net earnings were still held to be unlawful in and of themselves, it was provided as another temporary expedient that the Interstate Commerce Commission could approve such agreements and render them valid, or even go to the length of taking the initiative in bringing them about.

The Benefits of Consolidation. The benefits, from a social or national point of view, which might be expected to result from the consolidation of the railroads of the country into a limited number of systems as provided in the Act of 1920, are familiar ones. First, they would make it possible to realize important economies in operation and to utilize to the maximum the existing plant and equipment of the railroads, by methods similar to those employed by the federal government during its operation of the roads. These methods would include, of course, the pooling of locomotives and cars and their use anywhere in the system, the joint use of terminals and other facilities, heavy loading of cars, centralized purchases, standardized equipment, and uniform statistics. In the second place, the consolidation plan would replace numerous existing lines, of varying financial condition and command over traffic, with a small number of systems of approximately equal strength. As a result, rate regulation would be facilitated.

Rate Provisions of the Act of 1920. Congress, in drawing up the Transportation Act of 1920, was mindful of the necessity for adequate earnings in railroading and tried to make provision in the Act for rates which would make such earnings possible. The Commission was given the power to establish both maximum and minimum rates and, by fixing both, to decide upon the actual rates. Furthermore, it was made the duty of the Commission to exercise its ratemaking powers in such a way that the railroads as a whole, or as a whole in such rate groups or territories as it might designate, would earn an aggregate annual net railway operating income equal, or as nearly equal as might be, to a fair return upon the aggregate value of the property of such railroads used in the transportation service. The valuation of the railroad property, and the determination of what constituted a "fair rate of return" upon such property, were to be in the hands of the Commission. In determining such fair rate of return, the Commission was to bear in mind the transportation needs of the

country and the necessity of expanding railroad facilities, if adequate transportation was to be furnished. It will be noted that no provision whatsoever was made for individual railroads to earn a fair rate of return. It was only for the railroads as a whole, or in certain groups as designated by the Commission, that fair returns were to be sought. The word "group" in this connection may, we believe, be taken to mean a group of railroads somewhat larger than one of the limited number of systems into which the railroads of the country were to be consolidated.

The Recapture Clause. It was realized, of course, that rates high enough to give a fair rate of return for the railroads as a whole or in large groups would furnish some strong roads enjoying good location and excellent physical condition the chance to make an excessive rate of return. The "recapture clause" in the Act of 1920 was intended to provide against this contingency. According to the provisions of this clause, any railroad which received in any year a net railway operating income of more than 6 per cent on the value of its property devoted to transportation was required to share the excess above 6 per cent with the government. One-half of the excess income was to be turned over to the Commission for the purpose of setting up what was called a "general railroad contingent fund," while the other half was to be held in a reserve fund by the railroad. When the amount in this reserve fund equaled 5 per cent of the value of the railroad's property, the fund could be drawn upon, but only to meet fixed charges and make dividend payments in years when its net operating income fell short of the 6 per cent level prescribed by law. The general railroad contingent fund, on the other hand, was to be used by the Commission to make loans at 6 per cent interest to needy railroads, for the purpose of developing equipment or refunding maturing obligations, or to buy railroad equipment and lease it to the railroads.

Railroad Securities Under the Transportation Act of 1920. A third division of the Act of 1920 concerned itself with the control of railroad securities. The principal purpose of such control was to make sure that the financial operations of the railroads in the future would be of such a nature as to provide a sound basis for the rehabilitation of railroad credit and for the development of the railroad system. In addition, it was desired to protect the investing public against loss through extravagant and even dishonest financing, such as had taken place at times in the past. The principal provision of the Act, with respect to securities, was to make it unlawful for railroads to issue their own securities or to assume any obligations in connection with the securities of other railroads unless, after their application to the Commission and after investigation by the Commission of the purposes and uses of the proposed financial operation, the Commission should give its consent. The Commission was given rather wide discretionary power in deciding these financial matters,

but it was asked to bear two considerations in mind: (1) The proposed transaction must be for some lawful purpose within the business of the railroad, and (2) it must be reasonably necessary and appropriate for this purpose.

Service Regulation. The fourth major problem touched upon by the Act of 1920 was that of adequate railroad service. Each railroad was ordered to furnish safe and adequate car service, and to set up and enforce reasonable rules and practices with regard to such service. Car service was taken to include the supply and use of rolling stock, the supply of trains, and interrailroad relationships with regard to rolling stock. The Commission was also empowered, when it considered such action desirable, to formulate reasonable rules and regulations to govern the railroad car service. In case of emergency, the Commission could abolish all existing regulations with regard to car service, and proceed (without regard to the desires of any particular railroads) to provide for the unified utilization of railroad facilities, for the joint use of terminals, for preference or priority for certain commodities in transportation, and for direct routing and expeditious handling of traffic.

Finally, the approval of the Commission had to be obtained before an existing railroad enterprise, or any part of it, could be abandoned, or any new construction of railroads undertaken. Furthermore, in this connection, the Commission was again given power to take the initiative, and order a railroad to provide itself with safe and adequate facilities for carrying on its car service, or to extend its lines by means of new construction.

Progress Toward Consolidation. Though the Transportation Act of 1920 represented a refreshing and desirable change of attitude toward the railroad problem, it did not furnish a satisfactory basis for the operation of the railroads in the years after its passage. In the first place, comparatively little progress has been made toward the consolidation of the railroads. It is true, of course, that the Commission in 1921 published a tentative plan which provided for the consolidation of the railroads of the country into nineteen systems. One system was to provide for the needs of New England, five were to be trunk-line systems between New York and Chicago, and five were to be transcontinental systems from Chicago to the Pacific coast. The lower Michigan peninsula was to have one system, and there were to be two soft coal lines from the Chesapeake Bay to the Great Lakes. Finally, there were to be three systems in the Southeast and two in the Southwest. Extended hearings were conducted to consider the plan, but little has been done toward putting it into operation. However, several railroads have been allowed to carry out plans for consolidation with other roads or for the acquisition of control over them as provided in the law.

It must be remembered that consolidation cannot be forced upon

the railroads by the Commission under the present law, and consolidation has not gone forward at a very rapid pace. In the first place, the strong railroads, those in good physical condition and with demonstrated earning power, have been unwilling to join forces with the weaker roads to form the type of systems called for by the Act of 1920, or at any rate to go into such consolidations except on terms rather unfavorable to the weak roads. And, in some cases, the railroad officials who would naturally carry on the negotiations for consolidation have not been anxious to do so for fear they might be forced to accept positions in the new system which were inferior to the ones they already held.

The Control of Railroad Securities and Service. The provisions of the Transportation Act which related to railroad securities were not of great practical importance in the first two decades following 1920. Especially after 1929, railroad earnings were low and railroad credit did not rate so high as in former times. The carriers consequently experienced considerable difficulty in refunding their maturing obligations on satisfactory terms, and new issues, for many roads, were practically out of the question. The control of railroad service by the Commission was a source of irritation to railroad executives. They complained that the situation was one in which a company could not extend its facilities if business was profitable, or abandon production if business resulted in large net losses, without the approval of a governmental commission, and in which a company might be asked to share its facilities with competing companies.

TABLE 55. THE RATE OF RETURN EARNED BY LINE-HAUL RAILROADS, AND THEIR LESSOR SUBSIDIARIES, UPON THE AGGREGATE VALUE OF THEIR PROPERTY DEVOTED TO THE TRANSPORTATION SERVICE, 1921-45^a

1921	3.04%	1933	2.03%
1922	3.89	1934	2.01
1923	4.72	1935	2.20
1924	4.64	1936	2.95
1925	5.15	1937	2.59
1926	5.45	1938	1.65
1927	4.68	1939	2.62
1928	5.07	1940	3.02
1929	5.31	1941	4.41
1930	3.62	1942	6.58
1931	2.21	1943	6.03
1932	1.37	1944	4.89
		1945	3.90

^a Dr. D. P. Locklin, Professor of Economics, University of Illinois, kindly furnished us with these rates of return which he had computed.

Railroad Earnings Between 1920 and 1940. The most serious criticism of the Act of 1920 is that, in the first twenty years of its operation, railroad earnings were never entirely satisfactory and sank to a very low level after 1929. Apparently many people thought that the Act had disposed,

for many years to come, of the problem of adequate railroad earnings; but a study of the net operating income of the railroads after 1920 discloses that this was decidedly not the case. The rates of net operating income of the line-haul railroads of the United States and their lessor subsidiaries, based upon the aggregate value of their property devoted to the transportation service, are shown in Table 55 for the years 1921 to 1945. These percentages are calculated on the basis of reported investment in railroad properties, plus materials and supplies and minus reserves for depreciation.

While it is difficult to say just what rate of return upon the aggregate value of railroad properties would be adequate, and no more than adequate, for the maintenance of an efficient transportation system, we may at least point out that the rates actually earned by the railroads between 1920 and 1940 were consistently below the rate determined upon by the Commission as one which it considered adequate and reasonable. The Commission decided in 1922 that, for the railroads as a whole, a rate of $5\frac{3}{4}$ per cent upon the aggregate value of the railroad properties used in the transportation service would be adequate; and it will be remembered that under the Act of 1920 the "recapture" of the earnings of individual railroads was to begin at 6 per cent. If the Commission's figure of $5\frac{3}{4}$ per cent is accepted as satisfactory for the railroads of the country as a whole, it is clear that the railroads, even in the period of relatively good business between 1921 and 1929, did not earn an adequate rate of return in any year.

Railroad Finances in the Great Depression. In the post-1929 depression, with its sharp decline in the volume of goods requiring transportation by any agency, the railroads were very hard hit. Their net earnings fell from 5.31 per cent in 1929 to the ridiculously low figure of 1.37 per cent in 1932. Between 1932 and 1940, the "peak" in railroad earnings occurred in 1936, when a rate of 2.95 per cent was achieved. The earnings rates we have presented are for net operating income *before the payment of interest charges on bonds*. After paying interest charges, the railroads had net deficits in 1932, 1933, 1934, and 1938, and very small net incomes in other years.

The number of passengers carried by the railroads, which had averaged 1,114,055,000 annually from 1916 to 1920, declined to 432,980,000 in 1933; and the revenue freight carried, which had averaged some 427,234,000,000 ton-miles from 1926 to 1930, fell to 233,977,000,000 ton-miles in 1932.⁵ Railroads failed in large numbers during the 1930's. At the end of 1940, 104 railroad companies with 75,765 miles of track were in receivership or trusteeship.⁶ This mileage represented 31 per cent of the total for

⁵ *Statistical Abstract of the United States, 1935*, pp. 368-375.

⁶ J. H. Parmelee, *A Review of Railroad Operations in 1940*, Washington, Association of American Railroads, 1941, pp. 9, 10.

the United States. Even heavier casualties would probably have occurred had it not been for the activities of the Reconstruction Finance Corporation and Public Works Administration in lending \$987,579,305 to the railroads during these troubled years. Of this sum, \$376,386,271 had been repaid by the railroads by the end of 1940.⁷

THE CAUSES OF THE RAILROAD PROBLEM

The Problem of "Fair Valuation." While the desperate situation of the railroads in the 1930's was largely chargeable to the post-1929 depression, the rise of competing forms of transportation and defects in rate-making and rate regulation were also contributing factors. The Transportation Act of 1920 directed the Interstate Commerce Commission to use its rate-making powers in such a way that the railroads as a whole, or in groups designated by the Commission, would earn a fair return on a fair valuation of their properties devoted to the transportation service. This rule of rate-making sounds eminently fair, but it is difficult to apply. To begin with, what is a "fair valuation" of the properties of railroad companies? The use of the value of industrial properties as the basis for determining what earnings should be granted the owners exactly reverses the customary economic procedure. For the value of productive facilities ordinarily *depends upon the earnings* which the owners are able to make with their help. The *earnings* are capitalized at the current rate of interest, and this capitalization is the *value* of the productive facilities. Clearly, the valuation of the railroad properties for rate-making purposes had to be made on some other basis.

To many persons, the *cost* of the railroad properties seemed to suggest their value, but the application of the cost formula was also difficult. Should the value of a railroad's properties be the amount actually spent in acquiring them, or should it be what would have to be spent, at the time of valuation, for new properties with equal productive capacity? If original cost, and not reproduction cost, is decided upon, should the original cost include all expenditures actually made by the railroad, or merely an amount which it would have been "prudent" or "necessary" to spend? The principle of a fair return upon a fair valuation has lost much of its significance for railroading since 1933, and does not warrant a detailed examination at this point. It will be considered more fully in our treatment of public utilities in the following chapter.

The Problem of a "Fair Return." The Transportation Act of 1920 provided for the recapture of the earnings of individual railroads in excess of 6 per cent on the valuation of their properties, and the Interstate Commerce Commission decided that $5\frac{3}{4}$ per cent was a "fair rate of return." To make $5\frac{3}{4}$ per cent on the aggregate value of their proper-

⁷ *Ibid.*, p. 11.

ties over a period of years, the railroads would have to make higher earnings in some individual years, since they would certainly make less in others. It was possible, of course, for individual railroads to net more than $5\frac{3}{4}$ per cent in some years, by sharing with the government the earnings in excess of 6 per cent; but the rates which the railroads as a whole could charge for their services appeared to be adjusted in such a way that no more than the prescribed fair return would be earned by them as a whole in any year, while in some years the rate was certain to be less than that established by the Commission. This situation appears to be inconsistent with any satisfactory long-run interpretation of a fair rate of return.

Other Experiences with the Rule of Rate-Making. The rule of rate-making of the Transportation Act of 1920 was unfortunate in that it gave many people the idea that expert rate-making by the Commission would insulate the railroads against the effects of booms and depressions in general business, and afford the railroads a stable rate of return year by year. This hope has been shown to be entirely unrealizable by the events of recent years. The rule of rate-making apparently created, also, a disposition on the part of railroad executives to place complete responsibility on the Interstate Commerce Commission whenever the railroads failed to make a fair rate of return. Finally, the rule of rate-making has been shown to be a will-o'-the-wisp in a period of rapid technological change, such as that which has prevailed in the transportation field in recent years. Such technological changes usually require important readjustments in the industries affected, and may impose severe losses on established producers in the field. The investments which were made in the railroad industry may have appeared necessary and sound when they were made, but the rise of other forms of transportation may have rendered a part of the railroad facilities unnecessary and obsolete for purposes of peacetime transportation. Under such conditions, it may be impossible to set up any rate structure which will afford the railroads a fair rate of return on the entire actual investment which they made in their productive facilities, and it would seem logical to revalue the railroad properties so that the earnings which it is possible for the railroads to make will constitute a fair rate of return.

The Demand for Railroad Services. Some years ago, when the railroads provided the only satisfactory means of long-distance transportation, they could count on carrying most of the passenger and freight traffic of the country. In other words, the demand for their service was inelastic. Under this condition of demand, high rates for passengers and freight tended to yield better financial returns than low rates, and a rate increase could usually be depended upon to increase railroad earnings, if additional income was necessary.

But in recent years, motor vehicles and other carriers have developed

into efficient and satisfactory agencies of transportation. Consequently, the country is no longer absolutely dependent upon the railroads and, for some types of traffic, can take the railroad service or leave it, depending upon the comparative rates and service of the railroads and other transportation agencies. Hence, the demand for railroad service is relatively elastic in peacetime. Under this condition of demand, high rates may prove financially disastrous to the railroads, while low rates may bring increased business and improved net earnings.

Some events of the 1930's suggested that many railroad executives had failed to recognize the changes that had taken place in transportation, and continued to think of the service provided by railroads as absolutely essential. When railroad traffic and earnings declined rapidly after 1929, the railroads in 1931, 1935, 1937, and 1938 petitioned the Interstate Commerce Commission for increases in freight rates. Some of the requests were granted and some rejected, but the increases in freight rates were not very helpful in the face of poor business conditions, the small total volume of traffic, and strong competition from other types of carriers. The conservatism of railroad officials also manifested itself in the slowness with which they adopted improvements in railroad equipment and service, and by their opposition in 1936 to the Commission's decision to reduce railroad passenger fares in the hope of increasing traffic and earnings.

The Railroad Labor Situation. Another factor operating to accentuate the railroad problem was the favorable treatment which the railroads have been required by law to afford the workers in the industry. The federal government, in carrying out its policy of railroad regulation, has not hesitated to raise the status of labor in the industry. In 1916, the average railroad employee worked 3151 hours for an income of \$891.61, or 28.3 cents an hour. In 1940, the average employee worked a little over 2547 hours for an income of \$1913, or 75.1 cents per hour. Hence, he worked 19 per cent less time in 1940 than in 1916, but received wages amounting to 114 per cent more. The total wage bill of the railroads was almost 34 per cent greater in 1940 than in 1916, and the total number of employees was about 38 per cent smaller.⁸

The railroads are compelled by law to maintain safety appliances for the protection of their workers, and the employees, of course, receive free transportation from the roads for which they work. They also receive various financial benefits under such laws as the Railroad Retirement Act and the Railroad Unemployment Insurance Act. Recent proposals for the benefit of railroad workers include the payment of the same wages for six hours' work a day as are now paid for eight hours, and dismissal compensation for employees affected by abandonments or unifications of railroads. While these advantages may not be greater than the railway employees should enjoy, they have unquestionably constituted a heavy

⁸ *Ibid.*, p. 33; and *A Yearbook of Railroad Information, 1940 Edition*, pp. 62-66.

burden upon the industry in times of depression. On this account, a general 10 per cent reduction in railway wages was permitted, and became effective February 1, 1932. However, the 1931 level of wages was completely restored by April 1, 1936.

Competition in Transportation. Probably the principal factor giving rise to the railroad problem was the loss of passenger and freight traffic to automobile and water carriers, both before and during the post-1929 depression. To be sure, the figures for 1939 show that the railroads were still carrying 62 per cent of all freight in the United States, as against 26 per cent for motor and water carriers combined. However, the railroads in 1939 handled less than 9 per cent of the passenger traffic, of which almost 91 per cent moved in busses or private automobiles.

After many years and much legislation of the trial and error variety, we eventually arrived at the significant conclusion that consolidation and cooperation of railroad lines are preferable to their competition as a means of obtaining efficiency and economy. However, we have been slow to realize that it is equally likely that coordination and cooperation of the several types of carriers—rail, water, motor, and air—would be better than competition, from the point of view of developing an adequate and efficient national system of transportation. Of course, not all of the railroad traffic losses were due to the competition of other types of carriers. Moreover, the railroads have no legitimate grievance in connection with the loss of traffic to other types of carriers, so long as the traffic gains of these carriers are based on superior service, more efficient operation, and lower costs. But the railroads have often charged that traffic has been taken from them by unfair competition. Into this question we must look a little further.

Water Competition. There can be no doubt that there is a place for water carriers in our transportation system, but the railroads have complained that much of the traffic handled by water carriers was secured on the basis of costs that were low only because of special advantages and favored treatment received by these carriers—treatment not accorded the railroads. In other words, it is contended that the competition furnished by some water carriers is essentially unfair to the railroads.

Certain inland waterways have been constructed at heavy cost to the federal government, and have proceeded to charge shippers rates so low that the receipts would barely cover the operating expenses of these water lines. When this sort of thing takes place, the shippers, of course, are not paying the full costs of transportation, but are being subsidized because the taxpayers assume the expenses for fixed charges and maintenance. The railroads, on the other hand, must maintain tracks, bridges, and terminals, and pay their own fixed charges and taxes. Thus, they not only lose traffic to these waterways, but pay heavy taxes as well, part of which go to the support of the waterways, their competitors. Incidentally, the taxes paid by Class I railroads in 1940 amounted to \$396,000,000, or about

58 per cent of their net operating income of \$682,000,000, before paying interest charges.⁹

To take an extreme example, let us consider the Mississippi-Warrior Rivers Barge Line. It has been estimated that the government spent 600 million dollars on this system and its branches. After its construction as a war project during World War I, this barge line had, up to 1929, carried $7\frac{3}{4}$ million tons of freight at an average annual loss, borne by the taxpayers, of \$440,000; this figure is said to include no allowance for ordinary interest, taxes, and depreciation, such as a private transportation enterprise would have to meet.¹⁰

More recently it was estimated that, in 1940, every ton of freight which moved between St. Louis and Minneapolis by river cost the taxpayers \$5.77 over and above the amounts charged the shippers. Comparable costs to the taxpayers were \$41.61 per ton between Kansas City and St. Louis on the Missouri River, \$2.35 per ton between Pittsburgh and Cairo, Illinois, on the Ohio River, and \$1.48 per ton between Cairo and New Orleans on the Mississippi River.¹¹ Though some water routes may achieve better financial records than those we have mentioned, it is probable that most of the freight carried on inland waterways, amounting annually to many millions of tons, is transported at rates insufficient to cover total costs of production, if interest, maintenance expenses, and the taxes which would be collected from strictly private transportation agencies are included. This situation is clearly a cause for concern to the railroads.

Motor Competition. The competition of motor carriers was also serious during the 1930's. Not only did large numbers of people transport themselves from place to place by automobile, but common carriers by bus made quite a hole in the passenger traffic receipts of the railroads. In addition, large quantities of freight were being carried by truck, for both short and long distances. Some of the trucks operated as common carriers; that is, they ran over regular routes at specified times and served all comers. Others operated as contract carriers, furnishing each bit of transportation service on the basis of a separate agreement as to conditions of transportation, including rates, between the trucking company and the customers. Finally, many companies, engaged in other lines of business, did their own trucking.

The Advantages of Motor Carriers. Again, the railroads had no thought of contending that there is no place in our transportation system for carriers by motor, but they claimed that much of the competition furnished by these carriers was unfair to the railroads so long as motor carriers were unregulated as to rates and other conditions of service, and

⁹ J. H. Parmelee, *A Review of Railroad Operations in 1940*, p. 26.

¹⁰ E. E. Loomis, "Railroads vs. Waterways," *Review of Reviews*, February, 1929, pp. 79-82.

¹¹ *What Do You Get For Your Billions?* Washington, Association of American Railroads, January, 1947, p. 5.

enjoyed special advantages that were not available to the railroads in furnishing their transportation service. First, with regard to the alleged advantages enjoyed by motor carriers, it was pointed out that they are largely exempt from certain types of expense which the railroads have to bear. The roadbed for the motor carriers is the public highway, constructed and maintained at public expense, and the fixed charges on the investment in these highways are not paid by these carriers.

The motor carriers have shown that the heavy taxes which they pay are enough, or more than enough, to cover their share of the cost of constructing and maintaining the highways, but this is not quite the point. The motor carriers pay taxes, but these taxes represent their only contribution to the cost of constructing and maintaining their roadbed—the public highways. The railroads, on the other hand, claim that they have to construct and maintain their own roadbed, and in addition pay taxes which are at least as heavy as those paid by motor carriers. This claim must be discounted somewhat on the ground that rights-of-way, extra land, and in some cases money were given to the railroads by various governmental units many years ago.

In the second place, the railroads complained that the motor carriers were almost completely unregulated, since they were relatively free to charge any prices they liked for their services, whereas the railroads were not free to make changes in their rates to meet motor competition. Changes in railroad rates could be made, of course, but only slowly and with the consent of the Interstate Commerce Commission; and consequently the rates could not be made flexible enough to meet the rapid changes in rates open to the unregulated motor carriers. A truck owner could take a load a certain distance at a remunerative rate and, rather than return with an empty truck, could afford to pick up a return load at almost any price obtainable. With some exceptions, he could charge different people different rates for exactly the same service. He could charge more for a short than for a long haul, and was subject to almost no restrictions as to adequacy or regularity of service, being permitted to enter or quit the business at will. None of these advantages were enjoyed by the railroads. To have permitted competition between motor carriers and the railroads to continue on the terms described above, would have been to sanction a condition which was fraught with danger for the railroad industry, and to make it extremely unlikely that the railroads, being closely regulated, could earn a return adequate to insure continuous, efficient transportation service.

SOLVING THE RAILROAD PROBLEM

New Federal Agencies. As a result of the depression and other factors affecting the railroad problem, the railroad industry was in a woeful con-

dition when the Roosevelt administration took office in March, 1933. This administration, however, lost no time in trying to assist the railroads. In 1933 a law was passed creating the office of Federal Coordinator of Railroads. The duties of the Coordinator were (1) to encourage and promote, or require, the elimination of unnecessary duplication and waste, and (2) to recommend further legislation for the improvement of transportation conditions. However, the Coordinator did not actually require the railroads to cooperate or to coordinate their facilities, and the railroads were willing to do very little on a voluntary basis, so the accomplishments of the Coordinator were not important.

The office of Federal Railroad Coordinator was discontinued in 1936, but the Transportation Act of 1940 set up a Board of Investigation and Research for the transportation field as a whole. The Board had three members appointed by the President, and a statutory life of two years with a further extension of two years at the option of the President. The work of the Board fell into three general categories: (1) It was to study the extent to which public aid is given to rail, motor, and water carriers, and the taxes which are paid by these carriers to the various governmental units. (2) It was to examine the relative economy and fitness of these types of carriers, to determine the kinds of work for which each is especially suited and methods for developing the carriers into an adequate national system of transportation. (3) It had the power to investigate or consider any other matter relating to these transportation agencies which it thought might improve transportation conditions and effectuate the national transportation policy declared in the Interstate Commerce Act.

Rate-Making and the Recapture Clause. In 1933, the recapture provision of the Transportation Act of 1920 was repealed. This clause, it will be remembered, required individual railroads to turn over to the government one-half of their net operating income in excess of 6 per cent on the value of their properties devoted to transportation, and to place the remainder of such excess earnings in a reserve fund. The recapture clause had been a source of great annoyance to the railroads, though it probably was not a serious financial burden in view of the generally low railroad earnings since 1920. The clause seemed to be inconsistent with the declared principle of allowing the railroads to earn a fair return, in the long-run sense of that term, and we believe its repeal should be permanent.

The general rule of rate-making was also changed by the Transportation Act of 1933, and the emphasis is no longer placed simply on the "fair return on a fair valuation" as in the Act of 1920. The new principle provides: "In the exercise of its power to prescribe just and reasonable rates the Commission shall give due consideration, among other factors, to the effect of rates on the movement of traffic; to the need, in the public interest, of adequate and efficient railway transportation service at the lowest cost

consistent with the furnishing of such service; and to the need of revenues sufficient to enable the carriers, under honest, economical, and efficient management, to provide such service." Though this new principle is somewhat less definite than the old one, it will probably furnish a more satisfactory general basis for rate regulation.

Passenger Rates. The Interstate Commerce Commission, through its control of both maximum and minimum railway rates, holds the power to decide what passenger and freight charges are to prevail. In 1936, the Commission decided to investigate the effects of reduced passenger rates. It ruled that the basic passenger fare should be changed from 3.6 cents to 2 cents a mile in coaches, and to 3 cents in Pullman cars; and also eliminated the 50 per cent surcharge on Pullman service. It was hoped that these reductions would bring an increase in passenger traffic which would more than offset the lower fares, and thus yield the roads a greater net income from passenger traffic. The results of this experiment cannot be stated very definitely. Railroad passenger traffic picked up sharply under the low rates, but before the full effects of the reduced charges could be thoroughly tested, the business recession of 1937-38 brought an upset to all calculations.

The reduced fares affected only the eastern railroads, since the roads in other parts of the country had already reduced their passenger fares. In July, 1938, the Interstate Commerce Commission permitted the eastern roads to raise the basic passenger fare from 2 to 2½ cents a mile, and these roads promptly made the change. The increased rate was experimental, however, and in February, 1940, the Commission denied a petition by most of the eastern roads for the continuance of the rate. Over strong opposition of the petitioning railroads, which threatened to carry the matter to the Supreme Court, the Commission ruled that the basic passenger coach rate must return to 2 cents a mile as of March 24, 1940.

Improvements in Railroading. In the late 1930's, the railroads manifested a highly progressive attitude toward their business. Some adopted streamlined trains for certain routes, and these trains both increased the speed and convenience of the service and lowered the operating costs. Most roads installed air-conditioned passenger cars, and made other changes which increased the comfort and convenience of railroad travel. Many inaugurated what is called a store-door pick-up and delivery service, to make the railroad freight service comparable to that furnished by motor carriers, and in some cases began to operate their own trucks and busses. In 1940, 66 leading railroads announced a new scheme to increase passenger business by selling railroad tickets on the installment plan. The plan operated through a separate company, called the Travelers' Credit Corporation, and applied only to trips costing \$50 or more. Applications for credit were passed upon promptly, the customer obtained his ticket and took his trip, and payment was made in monthly installments. Such a

wide-awake attitude on the part of the railroads was likely to be much more conducive to a solution of their problems than their former "stand-pat" position.

Financial Reorganizations. Some railroads found a partial solution to their problems by means of financial reorganization. The Transportation Act of 1920 did not give the Interstate Commerce Commission complete control over reorganization, but the Commission could pass on petitions submitted by railroads under the Bankruptcy Act of 1933. Over a period of several years, the Commission approved reorganization plans for 29 out of 43 petitioning railroads. These plans, when finally put into effect, would have reduced the total debt (including unpaid interest) of these railroads from \$4,056,426,489 to \$1,749,573,800, and their obligatory fixed charges from \$141,580,228 to \$39,120,559.¹²

The Motor Carrier Act. A very important development in the transportation field was the passage, in 1935, of an act to regulate motor carriers. The Act did not actually become operative until several months of 1936 had elapsed. While this legislation was not intended primarily to protect other forms of transportation, but rather to improve and stabilize conditions in the motor carrier industry itself, the competition of motor carriers has affected the railroads so seriously in the past that we may well consider briefly the provisions of the Motor Carrier Act.

Provisions of the Act. The law applies to common carriers, contract carriers, and brokers engaged in interstate commerce by motor vehicles, but not to private carriers, except possibly with respect to safety regulations. The Act gives the Interstate Commerce Commission authority to prescribe rules governing employees, hours of service, and standards of equipment in the motor carrier industry. The numerous exceptions to the application of the law include school busses; taxis; hotel busses; motor vehicles operated by the Department of the Interior in the National Park Service; motor vehicles used by farmers; motor vehicles of cooperative agricultural associations; trolley busses operated by electric power; motor vehicles carrying livestock, fish, and agricultural commodities exclusively; motor vehicles carrying newspapers exclusively; transportation within municipalities and adjacent areas; and, casual, occasional, or reciprocal transportation by a person not engaged in transportation as a business.

Common carriers must secure certificates of public convenience and necessity, and must show the need for their service and their willingness and ability to perform it. Their business may include movements between fixed terminals and over regular routes, and only such business, but equipment and facilities may be added freely. Contract carriers must secure permits to operate, and must show the need for their service, their ability to perform it, the nature of the goods to be transported, and the territory to be served. They do not operate between fixed terminals, or

¹² *Fifty-Eighth Annual Report of the Interstate Commerce Commission*, p. 15.

over regular routes. Brokers, or persons other than carriers and their agents who sell transportation which is subject to the Act, must secure licenses, and show the need for their service and their ability to perform it. Common carriers already in operation on June 1, 1935, contract carriers in operation on July 1, and brokers in business on October 1, were allowed to secure certificates, permits, or licenses without further proof by making proper application before the last available date fixed by the Commission.

Common carriers must file rates and abide by them, subject to heavy fines for transporting without filing rates or for charging rates other than those on file. The rates must be reasonable and non-discriminatory, and may be changed only upon thirty days' notice to the Commission and the public. Contract carriers need file and publish only minimum rates. They may charge more than these rates, but changes in the minimum rates require thirty days' notice. The Commission does not have authority to prescribe the original rates for the motor carriers, but upon complaint or on its own initiative it may suspend and investigate any rates except the original ones. It may investigate the lawfulness of the rates on file and if, after holding hearings, it finds that rates do not comply with the law, it may prescribe new rates.

For purposes of enforcement, a division of four members of the Commission was created to supervise all matters pertaining to motor vehicles. Under this division, a motor carrier bureau was established with district offices in various parts of the country. Violations of the law are subject to a \$500 fine for a first offense, and \$2000 fine for each additional offense. These penalties apply to both shippers and carriers. The common carriers must give bills of lading for goods transported, and the carrier which first handles a shipment is responsible to the shipper for any loss, damage, or injury caused by it or any other carrier, but the first carrier has a claim upon a subsequent carrier if the fault lies with the latter. The Commission controls security issues, consolidations, mergers, and acquisitions of control in the industry, and may recommend additional legislation. It is also authorized to investigate and report on the need for regulations as to the size and weight of motor vehicles.

At the very outset of the operation of the law there was considerable confusion. Motor carriers filed tariffs and then requested immediate changes. In some cases they failed to collect the published rates and fares, and did not make their tariffs available for public inspection. Sometimes the rates announced by carriers differed considerably from those announced by their authorized agents, and the carriers complained grievously about one another. It was clear that there were considerable practical difficulties to be overcome in enforcing this law, because there were so many operators and because the business of many motor carriers was by no means so regular, well established, and easy to supervise as that of the railroads.

Motor Rates and Rail Rates. It has been common practice for motor carriers to disregard the traditional railroad principle of basing freight rates on what the traffic will bear. They have usually charged flat rates for transporting freight without regard to the value of the articles and the rate classes in which the railroads classified them, or have charged a flat rate at least for articles in the first three classes of the railroad freight classification. This practice developed from the high degree of competition in the motor carrier industry, which led operators to emphasize the *cost of service* rather than *value of service*. Its effect was the diversion of a considerable amount of freight traffic in articles of high value from the railroads to the motor carriers.

The railroads adopted a number of devices to meet this situation, the simplest of which was to lower freight rates on individual articles, reclassify such articles, or grant exceptions to classifications. Again, they developed "all-freight" or "all-commodity" rates for carrying freight, usually in carload lots, without regard for the classifications of individual articles that made up the shipments. These all-freight rates are commonly between 36 and 50 per cent of the rates on first-class freight. In some cases, flat railway rates on loaded trucks, trailers, semi-trailers, or "containers," when loaded with almost any kind of freight, have been authorized by the Interstate Commerce Commission.

The railroads have long charged lower rates for carload shipments than for less-than-carload lots of freight, but there have been no special rates for shipments involving several carloads or even a trainload, and no gradations between the carload and less-than-carload rates. Recently, however, the Interstate Commerce Commission has permitted some railroads to fix lower rates for multiple-carload shipments than for carload lots; and the railroads may thus be able to recover some of the freight traffic that has been moving by water in cargo lots. The railroads have also begun to establish graduated "volume rates" for large less-than-carload shipments. For example, the less-than-carload rate may apply to shipments up to (say) 5000 pounds, a somewhat lower rate to shipments between 5000 and 10,000 pounds, a still lower rate for shipments from 10,000 to 20,000 pounds, and so on until the rate is reached for full carload lots.

While these changes in railway freight rates have been developing, the motor carriers have moved in the direction of the rate-making policies of the railroads. In many cases they now use railroad classifications of freight, or very similar classifications, and their freight rates are the same, or almost the same, as those of the railroads. However, common carriers by motor can scarcely afford to adopt railroad freight classifications and rates unless the contract carriers can be made to do the same, or unless the trucking operations of contract carriers and of industrial or other firms can be restricted. In general, the movement of motor carriers toward railroad freight classifications and rates seems undesirable, for its com-

pletion would deprive the public of the economies of motor transportation. Motor carrier rates should probably be allowed to rest on the competitive basis of cost of service, with business divided between the railroads, motor carriers, and other transportation agencies on the basis of convenience, efficiency, and cost.

Water-Carrier Regulation. While the Motor Carrier Act brought another large section of the transportation field under the jurisdiction of the Interstate Commerce Commission, the Commission had only limited control over water carriers. That is, where joint rail and water routes were used, and in the cases where railroads were allowed to own water carriers, the Commission had jurisdiction. There was great need for the regulation of water carriers, comparable to that which had been applied to railroads and motor carriers. In the Transportation Act of 1940 that need was met. With the exception of contract water carriers which do not compete with common carriers, and common or contract water carriers of commodities in bulk whose cargo space is not used for more than three commodities at one time, the control of common and contract water carriers was placed in the hands of the Interstate Commerce Commission. The Commission may prescribe maximum, minimum, or specific rates; and it has control over the entry of firms into water carrier service, consolidations of firms, security issues, accounts, and other matters which it controls in the case of rail and motor carriers. The air transportation industry has also been thoroughly regulated since 1938, under the Civil Aeronautics Act and the Civil Aeronautics Board, but this development was of less importance because of the very small volume of traffic that has moved by air up to the present time.

The National Transportation Policy. The Transportation Act of 1940 was also noteworthy for its statement of a national transportation policy. It said:

It is hereby declared to be the national transportation policy of the Congress to provide for fair and impartial regulation of all modes of transportation subject to the provisions of this Act, so administered as to recognize and preserve the inherent advantages of each; to promote safe, adequate, economical, and efficient service, and foster sound economic conditions in transportation and among the several carriers; to encourage the establishment and maintenance of reasonable charges for transportation services, without unjust discriminations, undue preferences or advantages, or unfair or destructive competitive practices; to cooperate with the several States and the duly authorized officials thereof; and to encourage fair wages and equitable working conditions;—all to the end of developing, coordinating, and preserving a national transportation system by water, highway, and rail, as well as other means, adequate to meet the needs of the commerce of the United States, of the Postal Service, and of the national defense. All of the provisions of this Act shall be administered and enforced with a view to carrying out the above declaration of policy.

Certainly no one can quarrel with the general objective of fair and impartial regulation of all modes of transportation, but there may be some question as to what the objective involves. To many people, it would mean similar if not identical regulation of carriers by rail, motor, and water; but there are some reasons for believing that this approach is unsound. Carriers by water and motor are in general numerous and rather small, in comparison with the railroads. Their investments in plant and equipment and their fixed costs are smaller than those of the railroads, and the tendency to increasing returns is less pronounced. Motor and water carriers are not so likely, therefore, to engage in rate-cutting and cut-throat competition to attract additional traffic. It is somewhat easier for them, than for the railroads, to ascertain the cost of carrying goods, and their rates are more likely to be based upon cost of service than upon what the traffic will bear. Unlike the railroads, motor and water carriers do not often have a monopoly with respect to a large part of their traffic, and are unlikely to practice discrimination and to charge exorbitant rates. Finally, motor and water carriers can more readily adjust their facilities to increases or decreases in the volume of current traffic.

These considerations suggest that the regulation of rail, motor, and water carriers in exactly the same ways and to exactly the same extent would fall short of the stated objective of fairness and impartiality in regulation. However, it does not follow that motor and water carriers should be unregulated. The failure to regulate them would be unfair to the railroads, and would neglect the interests of the country as a whole, since motor and water carriers serve the public, enjoy public assistance, and make use of public property. Moreover, it does not follow that motor and water carriers should not be controlled by the same commission which controls the railroads. Unification and centralization of regulation in a single commission may be desirable, even though there should be differences in the nature and extent of regulation as between types of transportation.

TRANSPORTATION IN WARTIME

Railroad Traffic and Earnings. In spite of all that was done, the railroads experienced great difficulty in making ends meet, and their net operating income remained very low through 1940. However, World War II changed the picture. Gross national product increased from 88.6 billion dollars in 1939 to 187.4 billions in 1943, to 197.6 billions in 1944, and 197.3 billions in 1945; and there was a great increase in the quantity of commodities requiring transportation. Moreover, the 11,000,000 members of the armed forces had to be carried back and forth across the country, and large numbers of people who normally transported themselves by private automobiles in previous years were ruled off the highways as the result of gasoline rationing. At least temporarily, then, we needed

all of our productive capacity in the railroad industry, and could have used even more.

The railroads were rather poorly equipped to handle the tremendous job of transportation which the war thrust upon them. The number of freight cars available was 22.8 per cent lower in 1941 than in 1929, the number of passenger cars other than Pullman was 28.8 per cent lower, and the average number of employees was 31.0 per cent lower. Nevertheless, with very modest increases in equipment and an increase of 23.9 per cent in the number of employees, "the railroads in 1944 performed 55.1 per cent more freight service (ton-miles) than they did in 1941 and 225.3 per cent more passenger service (passenger miles). This remarkable increase in intensity of utilization of freight facilities is reflected in an average increase of 14.7 per cent in tons per car, a 48.6 per cent increase in ton-miles per car, a 24.4 per cent increase in tons per train, and a 57.6 per cent increase in ton-miles per mile of road. Passengers per car increased 113.3 per cent, and per train, 174.0 per cent; passenger miles per mile of road used in passenger service advanced 237.0 per cent."¹³ The wartime accomplishments of the railroads were truly remarkable. As a result of the great volume of traffic, the net operating income of the railroads increased from \$690,554,000 in 1940, to \$1,499,364,000 in 1942, to \$1,370,569,000 in 1943, and \$1,113,153,000 in 1944.¹⁴ The rate of return on the value of the railroads' properties increased from 3.02 per cent in 1940 to 6.58 per cent in 1942, 6.03 per cent in 1943, and 4.89 per cent in 1944.

Other Carriers. Motor carriers of property carried 34.5 per cent more tons of goods in 1942 than in 1940, and the corresponding percentages of increase for 1943 and 1944 were 49.3 and 49.6, respectively. The increase in average load per vehicle from 1941 to 1944 was 30.4 per cent for common carriers and 24.7 per cent for contract carriers.¹⁵ The percentage increase over 1940 in intercity passengers carried by motor carriers of passengers was: 1942, 134; 1943, 244; and 1944, 262. There was an increase of 46.5 per cent in the loading per bus.¹⁶ The amount of revenue freight carried by water carriers varied comparatively little during the war period, but the number of barrel-miles carried by oil pipe lines increased from 282 million in 1940 to 393 million in 1943 and to 438 million in 1944.¹⁷ There were also considerable increases in the volume of air traffic over the war period, but the total traffic remained extremely small as compared with the total traffic of all types of carriers.

On the financial side, the net operating revenues of Class I motor

¹³ *Fifty-Ninth Annual Report of the Interstate Commerce Commission*, p. 2.

¹⁴ *Ibid.*, p. 135.

¹⁵ *Ibid.*, p. 3.

¹⁶ *Ibid.*, p. 4.

¹⁷ *Ibid.*, p. 146; and *Fifty-Seventh Annual Report of the Interstate Commerce Commission*, p. 163.

carriers of passengers increased from \$34,005,000 in 1941 to \$147,530,000 in 1943 and to \$143,807,000 in 1944; but those of Class I motor carriers of property apparently declined over the war period, though the exact result is difficult to determine because of the change which took place in the number of carriers.¹⁸ The revenues of water carriers showed no noteworthy trend during the war period, and the net income of pipe-line companies declined somewhat between 1940 and 1944.

TRANSPORTATION IN THE POST-WAR PERIOD

The General Outlook. The prospects for transportation, at the close of World War II, were hard to assess. As the Interstate Commerce Commission said:

The situation abounds in uncertainties, not the least of which are as to the level of activity which business will maintain, the future of labor costs and taxes, and the effects of public expenditures on transportation facilities. Moreover, improvements in the instrumentalities of transportation mean new and heightened competition. The keynote of the post-war years will prove to be this quickening and extension of competition within and among the several forms of transportation and with private carriers. This competition has become identified in the public mind with the inroads which the commercial airlines are planning, and in part already are making, in the travel market, and in handling light freight. Competition between rail, motor-carrier, water, and pipe-line transportation, however, will undoubtedly increase in intensity. These various conditions emphasize the responsibility on us in seeing, so far as our powers permit, that the public interest is promoted and advanced along forward-looking lines and in the light of the national transportation policy declared by Congress in 1940.¹⁹

Prospects for Motor and Water Carriers. There were a number of favorable factors in the outlook for motor carriers of property and passengers in the post-war period. Wartime necessities had brought them valuable experience with economical operating practices, some of which could be carried over into peacetime operation. Technological improvements in vehicles and fuel had been made. Several states had liberalized their size and weight limits for motor carriers. Equipment notes and other obligations could be issued at relatively low interest rates. And better highway and street facilities were sure to be available as a result of federal, state, and local expenditures.

On the other side of the picture, the motor carriers needed large numbers of new vehicles to replace obsolete and worn-out equipment, and it was certain that these vehicles would have to be purchased at high cost, though fortunately their operating efficiency promised to be superior. The

¹⁸ *Fifty-Ninth Annual Report of the Interstate Commerce Commission*, pp. 143, 144; and *Fifty-Seventh Annual Report of the Interstate Commerce Commission*, pp. 162, 163.

¹⁹ *Fifty-Ninth Annual Report of the Interstate Commerce Commission*, p. 7.

motor carriers also faced difficulties in adjusting themselves to higher wages of labor and other costs, which were all the more serious because their rates were somewhat below those charged by the railroads. Finally, the motor carriers were threatened with the loss of a considerable volume of wartime traffic to which they had become accustomed and for which they had acquired additional equipment in some cases, and they had a problem of restoring services which had been suspended during the war.

Some water carriers ceased operating in their own right during the war, but most of these were able to secure substantial revenue by chartering their vessels or by operating as agents of the War Shipping Administration. Most water carriers came out of the war in sound financial condition. There were some gains in operating experience during the war, some obsolete and inefficient equipment was discarded, and marked technological improvements in vessels were made. On the other hand, the new ships were sure to cost more per ton than those which they replaced, and water carriers which ceased operating temporarily faced the problem of restoring physical operation, reestablishing contacts with shippers, and regaining traffic carried by other forms of transportation during the war.

The Railroad Situation. The outlook for the railroads in the post-war period was more favorable than it had been for many years prior to the war. The railroads had carried the vast volume of wartime traffic with only small increases in their investment in rail facilities. Consequently, they were not extensively overbuilt and were able, when they needed facilities in the post-war period, to take full advantage of recent technological advances. The railroads were in generally sound physical condition. Deferred maintenance during the war amounted to only about \$350,000,000, or 5.7 per cent of the total maintenance expense (excluding depreciation and amortization) in the years 1942-45.²⁰ Increased costs and high taxes had reduced the railroads' net operating income in 1943 and 1944, as compared with 1942, but their financial condition was much better than before the war. Reduced debts and fixed charges, as a result of reorganizations and of ordinary refunding and refinancing, were also important in the financial picture.

The railroads were better off in some ways because of their wartime trials and experiences. Knowledge (acquired during the war) of more efficient and economical operating practices was useful also in peacetime operation, and certain gains resulting from close cooperation between the railroads and their customers in wartime were maintained. Finally, the needs of wartime and the prospect of severe competition after the war tended to speed up improvements in railroad facilities. Many railroads had well-defined plans for discarding worn-out and obsolete equipment and for making major improvements in order to secure lower costs and give better service.

²⁰ *Ibid.*, p. 8.

However, a number of factors were less favorable. There was a strong prospect of rising prices in the post-war period, and these are always of concern to the railroads, with their comparatively inflexible rates. Second, the labor situation was threatening. We have already spoken of the relatively favorable treatment of railroad labor which existed as of 1940. In 1941, after extended discussion, attempts to mediate, and threats of a strike, the railroad unions and management reached an agreement, about a month before Pearl Harbor, which called for an average increase of 12½ per cent in the wages of railroad workers. The railroad labor situation was rather quiet during the actual war period, especially after wage rates and salaries in general were frozen at existing levels late in 1942. However, the railroad labor unions sought higher wages almost as soon as the shooting war was over, and succeeded in getting increases in wages by arbitration late in 1945. In spite of this fact, the railroad unions demanded still higher wages and went on strike in the spring of 1946. In the end, the workers received new wage increases amounting to 18½ cents an hour on the average, and most of the increases were made retroactive to January 1, 1946.

Third, the railroads were burdened with very heavy taxes. Total taxes paid by the roads increased from \$398,725,000 in 1940 to \$1,854,136,000 in 1943, and to \$1,849,909,000 in 1944.²¹ This load could be carried successfully in wartime, but even if lowered somewhat would be a heavy burden in the face of any considerable fall in traffic. Finally, the railroads could be sure that other types of carriers would give them keen competition if there should be a decrease in the total volume of traffic demanded by the public.

The outcome of these conflicting factors was not favorable to the railroads in 1946. Their wage bill amounted to \$4,086,000,000, or \$1,457,000,000 more than would have been necessary at the wage rates prevailing in 1940.²² Higher prices for fuel, materials, and supplies added many millions of dollars to railroad operating expenses. On the other hand, freight ton-miles were 14 per cent lower than in 1945, passenger traffic was 29 per cent below that of 1945,²³ and the railroads received no significant increase in freight and passenger rates effective during the year. The result was that the rate of return on the value of the railroads' properties, which had reached 6.58 per cent in 1942 and had fallen to 3.90 per cent in 1945, declined further, to about 2.90 per cent in 1946.

The Interstate Commerce Commission on December 5, 1946, authorized the railroads to make increases in freight rates averaging about 17.6 per cent, and to continue in effect the 10 per cent increase in passenger fares authorized in 1942. The new freight rates became effective January 1,

²¹ *Ibid.*, p. 135.

²² *What's New?* January, 1947, p. 10.

²³ *Ibid.*, p. 3.

1947; and, assuming that the railroads did not lose traffic to other transportation agencies under the higher rates, these rates were expected to produce \$800,000,000 in additional railroad revenues.²⁴ While the outlook for the railroads, even with such increased revenues, is none too favorable, we believe that a "wait and see" attitude should be maintained with regard to further proposals for solving the railroad problem. In other words, we think the time is not yet ripe to lend an ear to those individuals who contend that the railroads can no longer operate successfully under private management and insist that we should proceed at once to bring them under governmental ownership and management.

1. Why are the railroads important in our present economic system?
2. What is the nature of the "railroad problem"?
3. What is meant by saying that the railroad industry is one of increasing returns? How does the concept of increasing returns differ from that of decreasing costs?
4. Why are the railroads said to operate under conditions akin to those of joint costs?
5. Under what condition did the railroad industry operate during the early years of its life in this country? What abuses sprang up in connection with the railroads during this period? Why?
6. In what respects was the early legislation affecting the railroad industry defective? Explain fully.
7. What adjustments in railroad operation were made necessary by World War I? Why?
8. Why does consolidation in the railroad industry appear desirable?
9. What were the provisions of the Transportation Act of 1920 with regard to consolidation? What progress toward consolidation has been made under this law?
10. How did this Act undertake to control railroad service and the issuance of railroad securities?
11. What were the provisions of this law with respect to railroad rates and earnings? Explain.
12. How were railroad earnings affected by the Act of 1920?
13. How did the railroads fare in the depression years of 1929 to 1933?
14. Discuss the difficulties involved in applying the principle of a "fair rate of return on a fair valuation."
15. How was the "recapture clause" related to the problem of obtaining a fair rate of return for the railroads? Explain.
16. What change has apparently taken place in the nature of the demand for the services of the railroads? How has this change been related to the railroad problem?
17. "In general, the rule of rate-making provided by the Act of 1920 has proved unsatisfactory in practice." Discuss.

²⁴ *Ibid.*, pp. 2, 3.

18. What was the significance of the railroad labor situation in connection with the railroad problem?
19. To what extent was the railroad problem due to the competition of other transportation agencies? Explain.
20. Why was the competition of motor and water carriers characterized as unfair by the railroads? Were the contentions of the railroads with regard to this competition sound? Explain.
21. What happened to the rule of rate-making and the recapture clause in recent legislation?
22. "The railroads are likely to make greater net earnings from passenger traffic with low fares than with high fares." Discuss.
23. What improvements did the railroads make in their equipment and operation during the late 1930's?
24. Summarize the main provisions of the Motor Carrier Act of 1935.
25. How did motor and railroad freight rates change in the last few years before World War II?
26. How were the regulatory powers of the Interstate Commerce Commission extended by the Transportation Act of 1940?
27. "If carriers by rail, motor, and water are to be treated fairly and impartially, they should all be regulated in the same way and to the same extent." Discuss.
28. What happened to the traffic and earnings of railroads and other transportation agencies during World War II?
29. What is the general outlook for transportation in the post-war period in the United States?
30. What are the post-war prospects for motor and water carriers?
31. "The railroads of this country entered the post-war period in relatively good condition." Explain.
32. What are the unfavorable factors in the post-war railroad situation?
33. Should the railroads be brought under governmental ownership and operation at once? Explain.

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Public Utilities

THE RAILROADS, WHICH WERE DISCUSSED IN THE PRECEDING CHAPTER, ARE regarded as public utilities by some writers, while others, though admitting that railroads are "public utilities" in many essential respects, prefer to treat them separately. This separation makes for convenience in discussion, for the railroads have been regulated very largely by the federal government, whereas the control of public utilities has been carried on almost entirely by the state governments.

THE NATURE OF PUBLIC UTILITIES

Natural Monopolies. It is not easy to draw up a complete list of public utilities, since the items included under this heading change from time to time. Among the activities which have been classed as public utilities at one time or another are street railways; water, gas, electric, telephone, and telegraph companies; steamship lines; grain elevators; and stockyards—in addition to the railroads. When used in conducting such activities, private property is no longer strictly *private*, because in such uses it becomes "affected with a public interest."

What is it that causes a business to be classed as a public utility? One thing is the possession of the characteristics which make it a "natural monopoly." A natural monopoly is a type of business in which competition usually results in duplication of equipment and great waste. Imagine, for example, the waste which would occur if a city were served by two competing street railway systems, with duplicate tracks throughout the town, and duplicate rolling stock, power lines, and operating personnel. Each of these companies might be confidently expected to have a higher cost of production per unit of service than the cost would be if a single transportation company were operating in this city.

Most public utility businesses require a huge original investment in plant and equipment, and have large fixed or overhead costs. Such businesses enjoy increasing returns as they increase the volume of business transacted with a given amount of productive facilities, since the additional business increases only operating costs, and not fixed costs, while the total revenues expand considerably. Consequently a public utility company undertakes to

get as much business as possible and, when two utilities offer the same service to the same customers, their relations often degenerate into cut-throat and destructive competition. Such a condition, marked by violent rate-cutting, is likely to last until one company is ruined or absorbed by the other, or until the competitors see the light and agree to combine. Even if competition were as economical as monopoly in these businesses, it might still be desirable to have some of them operated as monopolies. In telephone service, for example, it is important, in the interests of convenience, for all telephone users to be subscribers in a single company, rather than to have them distributed among several companies. As a result of these and other considerations, governmental units have come to recognize the need for monopoly in such businesses, and have permitted and even encouraged monopoly operation.

Essential Products. A second characteristic of public utilities is that their products, whether services or commodities, are generally regarded as vitally necessary to the public. In our large cities, thousands or hundreds of thousands of people look to surface, subway, and elevated railway lines for transportation, and their dependence upon other public utilities, such as electric companies, is so great that a stoppage of service, even for an hour or two, may lead to considerable inconvenience or even to genuine suffering. In the field of communication many individuals and businesses depend largely upon the telephone or telegraph service. In general, the demand for public utility services is inelastic. To be sure, the demand for (say) gas, on the part of some users at least, may be elastic because of the existence of satisfactory substitutes, but the demand for heat, light, or power in some form or other is relatively inelastic.

Franchises. A third characteristic of public utilities is that many of them are dependent, for the right or power to operate, upon privileges or favors granted them by the public through various governmental units. Street railways, and water, gas, and electric companies, must use public streets or highways, or the areas above or below such streets and highways, in the conduct of their business, and are given grants, or "franchises," by state and local governments for this purpose. Moreover, governments sometimes grant public utilities the right to condemn private property for necessary purposes or to use public water power in their business.

Differential Rates. A fourth characteristic of public utilities is that a company, such as one supplying electric current, is usually permitted to sell its service to several classes of consumers for different purposes at different prices. It is quite impossible to determine the *exact* cost of supplying the service to any particular class of consumers and, as a result, the rates charged are likely to be arbitrary and to be based upon "what the traffic will bear."

THE REGULATION OF PUBLIC UTILITIES

With public utility businesses operating as monopolies in their particular areas, producing essential economic goods for which the demand is relatively inelastic, and depending in many instances upon special privileges or favors granted by the state, it is clear that the unregulated operation of these businesses by private enterprisers might result in great evils, including extortionate rates for inferior service and unfair discrimination between different consumers or classes of consumers. The possibility of operation of an anti-social nature led to early regulation of public utilities—so early, indeed, that the problems connected with public utilities were almost completely local in character, and their regulation could scarcely have been assumed to fall within the constitutional powers of the federal government. As a result, the regulation of public utilities has been conducted largely by the states.

Public Utilities Commissions. This regulation has not ordinarily been undertaken directly by state governments. Rather, the regulatory powers have been delegated to commissions. Some of the better-equipped public utility commissions have powers similar to those exercised by the Interstate Commerce Commission in regulating the railroads. They often control rates and fares, extensions and abandonments of service, the issuance of securities, the prevention of undue discrimination between different customers and classes of customers, the quality of the service, the valuation of utility properties, and accounting methods. Of all these many items, the most difficult and important is, of course, the regulation of rates.

The Regulation of Rates. The states, and their public utilities commissions, were at first left quite free to regulate the rates charged by public utilities. The courts, including the United States Supreme Court, refused to interfere with what was so obviously an exercise of powers granted to state governments by the Constitution and would neither set aside prescribed rates nor themselves set up rates for the utilities. Eventually, however, the court attitude changed and the Supreme Court decided that if rates set by state governments or their commissions were so unreasonable as practically to destroy the value of the properties of public utilities, they could be set aside as violating the "due process" clause of the federal Constitution. Thereafter, the commissions, while trying to protect the interests of consumers, have been kept from setting public utility rates at so low a figure that they would be confiscatory with respect to the properties of public utilities; and the general idea has developed that rates should be regulated in such a way as to enable the utilities to earn a "fair rate of return on a fair valuation of their properties."

The Problem of Valuation. It is all very well to say that the utilities should be allowed to earn a fair rate of return on a fair valuation of their properties, but quite another matter to apply the principle to specific

cases. The first difficulty is to establish a fair valuation. The property of a public utility scarcely has a value, in the usual economic sense of exchange value, since it is seldom bought and sold and is hedged about with restrictions and regulations which do not affect ordinary property. The value of a piece of industrial property is usually determined by the income it is capable of earning. But in the case of public utilities, earnings depend upon rates and these rates (if they are to represent a "fair return") cannot be set until after the "fair valuation" has been determined. Therefore, the commissions have had to turn to other methods of evaluating the properties of public utilities. The problem of valuation has usually been approached by way of "prudent investment cost" and "reproduction cost."

Prudent Investment Cost. Prudent investment cost is ordinarily taken to mean the amount of capital actually invested in a public utility enterprise, corrected for capital expenditures dishonestly made or made in a clearly wasteful or extravagant manner. There are several possible ways of arriving at prudent investment cost. It is sometimes said that the par value of the stock of a public utility represents satisfactorily the amount of the actual investment in the business. This criterion, however, could not be applied to all public utilities, since some have issued stock with no par value. Moreover, there may be only a vague relationship between the par value of a utility's stock and the actual value of its property. Some public utilities are overcapitalized, and have outstanding an amount of stock well in excess of the value of their properties. For example, a public utility company, just starting in business and short of cash, may wish to acquire a piece of property without paying cash for it. To induce the owner to accept stock in lieu of cash, the company may have given him stock which has a par value well above the cash value of the property that is being acquired. Of course, to allow public utilities which are overcapitalized to earn a fair return on their capitalization would be to grant them an excessive return on the actual value of their property.

Again, the par value of a company's stock may at one time have represented accurately the value of its property, but no longer do so because through poor management the utility has lost some of its original assets or had them depreciate in value. Or the property of a company may increase in value without the increase being reflected in the amount of capital stock outstanding. In either case, a fair rate of return on the basis of capitalization would give a return on the actual value of the property which was either larger or smaller than it should be. Consequently, capitalization has little to recommend it as a basis for valuation.

Another proposal is to assume that the market value of a public utility's stock represents the present value of its property. About all that can be said for this method is that a valuation could be readily obtained by finding the total value of the company's stock on the stock exchange. Such a valuation would be most unsatisfactory, however. The value of the company's

stock depends largely upon the rate of return which prospective owners hope to obtain by holding it, and the total value of its stock tends to be its present and probable future rate of earnings, capitalized at the current rate of interest. Since the total value of the stock depends upon the company's earnings, to make the earnings dependent upon the total value of the stock would be to reason in a circle. If a company were at present making an excessive return upon its actual investment, its stock would tend to sell well above par. And if the present value of its stock were taken as its valuation, a fair rate of return on this valuation would permit the continuance of an excessive rate of return upon the actual investment.

Original Cost. If we were to use prudent investment cost as a method of valuation, it would be necessary to find a satisfactory method of converting the term into action. This might be done, it is often said, by taking prudent investment cost to mean the actual original cost of a public utility's properties, adding the cost of additions and improvements, and deducting any depreciation in the properties or loss of assets. It is argued that such a valuation is eminently fair to all concerned. It grants a public utility a fair return on the capital actually invested in the business, as of the present time, and the utility has no right to claim better treatment. Moreover, it protects consumers from having to pay rates which would give the company a fair rate of return upon an excessive valuation of its properties. Finally, the valuation on the basis of original cost, once ascertained, would not change except when actual changes in investment occurred in the future, and it would provide a stable basis for rate regulation.

But there are some drawbacks to this method of valuation. One is the obvious difficulty of ascertaining original cost. Many public utility properties were acquired long years ago, and records of the transactions may have been lost or destroyed, if indeed they were ever kept. If a company originally acquired property by giving the owner stock instead of cash, should the original cost of the property be construed to be the par value of the stock given, or an estimate of its cash value at the time? Or if, at some time in its career, a company has bought out competitors, through either cash purchase or the exchange of securities, and, in order to be rid of the competitors, paid an excessive price for their properties, should original cost be interpreted to mean the price actually paid or only the construction value of the properties? Should an allowance be made the company for the original cost of promoting the company, of building up good will, and of acquiring a franchise and, if so, how large an allowance? How can we prevent companies from padding their costs, if original costs are used as the basis for valuation? These and other questions suggest that there is considerable room for error in estimating original cost.

Even if it should be possible to ascertain original cost accurately, there is no assurance that this method of valuation would be fair to public utility companies and investors at all times, since it does not take into

account changes in the general price level. The original cost method gives a fixed valuation to a public utility company's property, and a fair rate of return on this valuation means a relatively fixed money income. In a period of falling general prices, this stable money income would give increased purchasing power to the company and its stockholders, and impose a correspondingly heavy burden on the consumers, while in periods of rising prices it would bring decreased purchasing power for company and stockholders, and the consumers would be obtaining public utility services at bargain prices. This objection is not so serious as it sounds, however, for public utility commissions do not guarantee the utilities a stable money income. They merely try to regulate rates so that utilities will *normally* make a fair rate of return on the value of their property. Even if the rates are not reduced in a period of falling prices, the volume of business done at these rates will likely decline to such an extent that a utility's real income will not be enhanced unduly; and if rates are not raised in a period of rising prices, the increased volume of business at these rates may serve to keep the utility's real income from declining severely. However, the long-time upward or downward trends in general prices may serve to affect, either favorably or unfavorably, the purchasing power of the income received by public utility companies.

It is also said that the original cost method of valuation tends to discriminate between the consumers of the services of different utility companies. If one company's plant was constructed and its property acquired at a time when prices and costs were high, its consumers would have to pay rates sufficiently high to give the company a fair return on its high original cost. At the same time, the customers of another utility may be charged much lower rates because this company's plant was constructed and its property acquired at a time when prices and costs were low. Finally, the original cost method, when first introduced, may work a hardship upon persons who have bought the stock of public utility companies because of the high actual earnings of the companies and high returns paid on the stock. When the companies are subsequently limited to earning a fair return on the original cost of their properties, the dividends may be sharply reduced so that the stock will decline in value and deprive the owner of a part of his investment.

Reproduction Cost. The principal alternative to the use of prudent investment cost for valuation purposes is valuation on the basis of the reproduction cost of public utility properties. In applying this method, the cost of reproducing or replacing a company's properties is estimated and this figure is adjusted for depreciation, or the supposed difference in value between the actual properties and similar new properties. Of course, if the properties are not allowed to depreciate, an adjustment is not necessary. Valuation on the basis of reproduction cost is a more recent development than valuation on the basis of original cost, and

is more flexible and therefore more readily adjustable to changing business conditions. Moreover, it is said to be in stricter conformity with the dictates of economic theory. Since business enterprises ordinarily plan future production on the basis of prospective prices and prospective costs, rather than upon the basis of costs incurred in past production, it is held to be more logical to evaluate public utility properties for rate-making purposes on the basis of reproduction cost, rather than original cost.

However, it is difficult to get a definite valuation by the method of reproduction cost, for several obstacles stand in the way. Should reproduction cost be taken to mean the cost of constructing identical productive facilities or substitute facilities which would have the same total productivity? Should it be estimated as under present conditions and methods of construction or under methods and conditions which existed when the company's productive facilities were constructed? What would it now cost to acquire the company's franchise or build up the good will which it developed in the past? These questions are more readily asked than answered, and in the absence of satisfactory answers the proper valuation of a company's properties on the basis of reproduction cost is a debatable matter.

The flexibility of valuation on the basis of reproduction cost may be an advantage or a disadvantage. When the general price level falls, the cost of reproduction falls also, so that a lower valuation for a property is appropriate, whereas the reverse is true in a period of rising prices. Assuming that the rate of return remains unchanged, the money income of the company will decline as the purchasing power of money increases and will increase as the purchasing power of money declines, so that the real income of the company and its stockholders should remain fairly constant. In general, a fluctuating money income and stable real income would be preferable to a stable money income and fluctuating real income. However, this adjustability means that the valuation of a company would never remain stable for any great length of time, since it would change with changes in the general price level. As a result, a company's valuation would be constantly in a state of flux and neither the company nor the regulating commission would have anything definite to go on. The cost of reproduction method is advantageous in that it does not discriminate between the consumers of different utility companies, as does the original cost method; for two substantially similar plants would probably be given approximately the same valuation on the basis of reproduction cost, however different their original cost may have been because they were constructed at different times and under different cost conditions. Furthermore, the use of reproduction cost is likely to cause plants to be built efficiently and at low cost, since original cost will not affect valuation or earnings, while under the original cost method

there is an incentive to make the original cost high for valuation purposes. However, on the whole, the weight of opinion favors the original cost interpretation of prudent investment cost as the basis for public utility valuation.

The Fair Rate of Return. In addition to deciding, upon some basis or other, the valuations to be placed upon the properties of public utility companies, public utility commissions have to decide upon a fair rate of return on these valuations. This, also, is a difficult matter. The commissions must protect the public against the monopoly powers of public utilities, but at the same time the companies must earn enough to cover costs of production, so that they may render efficient service, maintain their productive facilities, and attract new capital for purposes of expansions and improvements. Moreover, in addition to deciding the rate of return they would like the utilities to earn on the basis of their valuations, the commissions must determine the prices for services which are most likely to produce the desired rate of return for the utilities, keeping in mind the uncertainty of business conditions and possible variations in the cost of producing the services. A given set of prices will produce different rates of return for different companies with identical valuation if the managements of the companies differ in efficiency. While problems of valuation and fair rate of return have attracted more attention than the problem of arriving at prices which will bring in the fair rate of return on the fair valuation, this latter problem is a very trying one.

Public utility valuation and rate regulation are so complicated that they are often dealt with in complete volumes, but enough has been said in the present chapter to enable the reader to appreciate their difficulty. Under the circumstances, it is not surprising that attempts by several agencies to determine the fair valuation and fair return for a public utility company have resulted in valuations which varied by hundreds of millions of dollars, and in proposed earnings in which the largest exceeded the smallest by 100 per cent.

In view of the attitude taken by the courts, it is not usually possible for public utility commissions to abandon openly the principle of a fair return on a fair valuation of property. However, in determining what a fair return is, a commission does not need to function in a vacuum. In Massachusetts, for example, the commission is said to take into consideration principally the economic situation of a public utility company. It considers whether the company is paying dividends on its stock, whether the stock is selling at or above par on the market, whether the company is providing adequate depreciation reserves and is accumulating a reasonable surplus, and whether its operating and maintenance expenses are being increased or decreased under current business conditions—and only then is the commission ready to hand down a decision in a rate case. The

commission makes no attempt to give the public utilities a specific *percentage* rate of return on the value of their properties, but merely tries to control rates so that the companies may pay dividends that are sufficiently high to keep the value of their stock above par and permit the utilities to market additional securities, when necessary, at not less than par. This attitude seems to have much to recommend it.

The Success of Public Utility Regulation. It was necessary for the state governments to delegate the regulation of public utilities to public utility commissions, for direct regulation by state legislatures would scarcely be feasible. But it must be admitted that commission regulation has not been entirely satisfactory. This may be accounted for in part by the fact that the commissions have been set to work solving problems for which there are no wholly satisfactory solutions. Some commissions have been given adequate powers and ample expert assistance, so that they have been able to operate successfully, but the reverse is true in many cases.

Many conditions among public utilities which the commissions were expected to remedy have continued to exist. They have often been unable to prevent utility companies from inflating or writing up the value of their assets, or from selling securities amounting to much more than the aggregate value of their assets. Indeed, it is probable that total overcapitalization in the public utility industry runs into billions of dollars. While the commissions have usually discounted to some extent the claims of public utilities with respect to the value of their properties, it is nevertheless true that the official valuations of these properties have often greatly exceeded the amount of the actual investment. A fair rate of return on an excessive valuation is equivalent, of course, to an excessive rate of return on a fair valuation.

Even if the valuation were perfect and the rate of return fair, the common stockholders of a utility company might still receive an unduly high return on their investment, because of the low fixed rates of return to holders of bonds and preferred stock. When the valuation is excessive, and the fair rate of return represents a very high return on total actual investment, the earnings of common stockholders on their investment may run to four or five times the nominal fair rate of return. It is true, also, that commissions have been unable to prevent excessive discrimination between different classes of customers. Of course, no one contends that all customers should be charged the same rates for (say) electricity, regardless of the amount of power used or the hours at which they use it, but electric companies have been known to sell a large part of their power to other utility companies at less than cost, and to industrial users at but little above cost, while charging domestic or residential consumers from fifteen to twenty times the average cost of generating and transmitting the current.¹

¹ C. D. Thompson, *Confessions of the Power Trust*, New York, E. P. Dutton & Co., Inc., 1932, pp. 216-227.

Weaknesses of the Commissions. While the regulatory problems faced by the commissions are very complicated, it is probable that much of the ineffectiveness of regulation has resulted from the inadequacy of the powers granted to some commissions and to defects in their personnel. The commissions control only electric light and power companies in two of the states. Gas companies are controlled by commissions in 40 states, water companies in 39 states, street railways in 40 states, and telephone and telegraph companies in 44 states. Only about two-thirds of the states have granted their commissions the authority to prescribe a uniform system of accounting for public utilities, and yet, without something of this sort, it is almost impossible to determine the facts needed for valuation and rate-making purposes. In only one-half of the states do the commissions supervise the issuance of securities by utilities, and in fewer still do they exercise any real control over the uses made of the funds derived from the sale of securities.

Members of the commissions are elected by popular vote in 16 states, although it would seem that positions requiring so high a degree of technical knowledge might better be filled by appointment. The commissions themselves are made up of three members each in 36 states, and consequently are often too small for effective work. In a few cases the functions of commissions are not clearly defined in the state laws, and many commissions are handicapped by reason of insufficient funds. In 1929, for example, total state expenditures for the regulation of both public utilities and railroads amounted to only \$7,200,000.² Despite these weaknesses, the commissions have done much by way of setting up standards of service and safety for the utilities, although, as was previously stated, they have not been especially successful with respect to valuation and rate-making.

Interstate Public Utility Activity. Two recent developments in the public utility field have conspired to make state regulation of the industry less effective than formerly. Many years ago, the business of the public utility was almost entirely local in character, but at present the services of a utility are often sold, at least in part, in other states than the one in which the company is located. Electric power is the public utility product which enters most largely into interstate commerce. This interstate business has created a curious "no man's land" of regulation. The Supreme Court has held that state commissions have no power to regulate rates or other matters in the case of electric power sold at wholesale by a company in one state to a company in another state for distribution in the latter. However, when a company in one state sells a public utility service directly to consumers in other states, the Court has ruled that such business may be regulated by the states unless and until the federal government

² The statistics on public utility commissions are from C. M. Clay, *The Regulation of Public Utilities*, New York, Henry Holt & Company, Inc., 1932, pp. 144-149; and C. W. Thompson and W. R. Smith, *Public Utility Economics*, New York, McGraw-Hill Book Company, Inc., 1941, pp. 197-206.

itself attempts regulation. These interstate activities of public utility companies are pretty clearly a part of interstate commerce and subject to federal control, but they are a complicating factor in state regulation.

The Development of Holding Companies. Another factor which has arisen to hamper state regulation of public utilities is the development of holding companies. Holding companies, as we shall see, may exert a tremendous influence for good or evil in the public utility field, but they are scarcely amenable to state control. They are connected with the public utility industry only through owning, directly or indirectly, a controlling interest in the stocks of actual public utility operating companies. Since they produce no utility services themselves, they do not come under the jurisdiction of public utility commissions; and since many of them operate in two or more states, they have not been readily controlled by the individual states. The problem of the holding companies has become so important that in 1935 the federal government made an attempt to control them and their activities. Before considering this attempt at federal control, we must look into the organization and practices of these companies.

HOLDING COMPANIES

The Nature of Public Utility Holding Companies. Any company which holds the stock of other concerns may be called a holding company, but the term is usually reserved for companies that own a controlling interest in the stock of other companies and actively direct the affairs of these corporations. In the public utility field, a "first-degree" holding company is a corporation that owns a controlling interest in the stock of one or more operating utilities (those which really produce and sell electricity or some other service to the public) and that directs the business activities of the operating company or companies. A "second-degree" holding company will own a controlling interest in the stock of one or more "first-degree" holding companies, each with a group of operating companies under its control. Similarly, there may be holding companies of "third degree," "fourth degree," and so on. Holding companies, of course, are not limited to the public utility field. They exist in many of our major industries, but the problems which they present are probably of greatest significance in the field of public utilities, and it is primarily in this field that holding companies above the first degree are found.

The Financial Functions of Holding Companies. The champions of holding companies in the public utility field claim that many advantages result from the operation of these corporations. A principal function of holding companies is to furnish capital to operating companies. Public utilities require a heavy investment in fixed capital, and much new capital is needed from time to time for extensions and improvements. Public utilities in towns and small cities have often secured from local sources

the funds with which to start in business, but they have often found it difficult to raise funds for extensions and improvements. They have been in a poor position to appeal to investment bankers for funds to be obtained through the issuance of securities, because they were small and unknown and lacked diversity of resources. In this connection, holding companies have been of assistance. They have accepted the securities of the small operating companies in exchange for needed funds, later recovering their outlay by marketing their own security issues, which were readily salable because the holding companies were comparatively large and well known and possessed resources (through the operating companies) which were well diversified in both character and location. Even when the security market has not seemed to be in condition to absorb new securities, the operating companies have often obtained funds from their holding companies, by direct loans. Through the operation of holding companies, the individual operating companies are able to secure capital on better terms than those on which they could secure it for themselves. It is claimed that such financial support has helped to improve the quality and reliability of service in small communities, and to replace small, inefficient plants with large, modern generating stations.

Other Holding Company Functions. Another benefit credited to the holding company is its ability to save money for its operating companies by acting as their purchasing agent. By purchasing at one time machinery, equipment, materials, and supplies for a number of operating companies, the holding company can buy in very large lots and obtain, in addition to lower prices, such advantages as better service, quicker delivery, and a prompter and more satisfactory adjustment of claims than the individual operating companies. Again, the holding company with a number of operating companies under its wing, can afford to have a department or a subsidiary company to provide the operating companies with expert construction and engineering service at a price lower than the operating companies would have to pay outside concerns. The holding company can also give its small operating companies the benefit of high-class managerial ability and the experience which would otherwise be available only to the largest companies. Finally, it is often possible for holding company organizations to supply service to farms, and to small communities which could not themselves support public utilities.

It would seem that, if there were no offsetting disadvantages, the holding company would be the fairy godmother of the public utility industry, transforming, as by a wave of the wand, inefficient, high-cost operating companies into efficient, low-cost enterprises, and furnishing managerial and other services, materials, supplies, and capital to the operating companies on most reasonable terms. Without the holding company, it might be argued, many of our public utilities would be unable to operate, or could continue in business only by charging higher rates than at present.

Why should anyone want to destroy or regulate so useful an organization? But there is, unfortunately, another side to the picture.

The Pyramiding of Holding Companies. If operating companies may enjoy these several benefits through the device of the holding company, it would seem that most of these advantages could be realized through the assistance rendered by a first-degree, or at most by a second-degree, holding company. But our holding company systems have not stopped at the second degree. Many of them have had at the top a holding company which was several times removed from the operating companies in its fields. According to a well-known writer on financial organization:

Out in Oregon, you find a little company called the Yawhill Electric Company. It belongs to the Portland General Electric Company. But the Portland Company belongs to the Pacific Northwest Public Service Company. This might be thought to be the parent organization. It controls the public utilities of Portland, the gas company in Seattle, and street railways and other utility companies in various towns. But this is not the end of the maze. The last-named company belongs to the Central Public Service Corporation, which owns other utility systems in Delaware, Maryland, and Virginia. And that in turn belongs to the Central Public Utility Corporation, which owns various other holding companies, with utilities and other sorts of enterprises from Maine to Oregon.

But this is still not the end. The Central Public Utility Corporation is held by a super-holding company called the Central Public Service Company. Why the little Yawhill Electric Company in Oregon, the Tri-City Gas Company in Alabama, the Bridgewater Electric Company in Maine, and the Lower St. Lawrence Power Company in the Province of Quebec, plus a maze of companies (including the *Compagnie d'Éclairage Electrique* in Haiti) in a dozen or more states, should all be huddled in this same holding company nest, no one can explain. And the interests which support these weird structures are powerful. Nothing short of action by the federal government, and plenary power in the agencies entrusted with the job, can clean up such situations.³

This should not be considered an exceptional case, for it is asserted that, in some public utility systems, the top holding company has been ten to fourteen stages removed from the actual operating companies. As to geographical distribution, it is well known that the Electric Bond and Share Company had operating companies in 36 states, and that each of eight other utility systems had operating units in from 11 to 29 states. While such complicated and widespread systems may not be justified from the point of view of the operating companies or the public, it is clear why the holding companies themselves desire to build up these complicated systems.

Power and Profits. The reason is this: As holding company is piled upon holding company, power and profits become increasingly concen-

³ J. T. Flynn and P. H. Gadsden, "The Holding Company Bill," *Forum and Century*, May, 1935, pp. 259-265.

trated in the hands of the few men who control the topmost holding company. The point may be illustrated by the following hypothetical example given by the Federal Trade Commission:

Suppose there are 100 local power companies, the aggregate total investment in which is \$1,000,000,000, each owned and operated by a separate corporation. The total investment might have been raised by the sale in the aggregate of \$200,000,000 of common stock, \$200,000,000 of 7 per cent cumulative preferred stock, and \$600,000,000 of 6 per cent bonds. If these companies are permitted by public authorities to earn 8 per cent on the total investment, or \$80,000,000 annually, of this, \$36,000,000 would be required to pay the bond interest and \$14,000,000 as dividends on the preferred stock. This leaves \$30,000,000 for the common stockholders, either to draw as dividends or to use in further expansion of the business. This amounts to 15 per cent on the common stock investment and has been made possible out of the 8 per cent earned on the total investment only because the major portion of the total invested funds was furnished by two classes of investors whose per cent of return is limited.

Suppose, however, a particular group of promoters would like to make more than 15 per cent from these power company investments, and for this purpose forms a holding company with a total capital of \$200,000,000 (the amount of the common voting stock of the operating companies), consisting of \$100,000,000 of 6 per cent collateral trust bonds or 6 per cent debentures, \$50,000,000 of 7 per cent cumulative preferred stock, and \$50,000,000 of common stock. This group may be able to furnish the common stock money and persuade others to furnish the bond and preferred stock money, or, furnishing the common stock money, they may persuade the holders of the common stock of the local operating companies to exchange those stocks for this cash, together with the collateral trust bonds and preferred stocks. Now the \$30,000,000 earned by the local operating companies on their common stock equities would accrue to the holding company. Out of it \$6,000,000 would go as interest on the bonds and \$3,500,000 would go as preferred dividends. This would leave \$20,500,000 for the group of promoters who hold the common stock of the holding company, which amounts to 41 per cent on their investment of \$50,000,000.

This group, however, might not be satisfied with this arrangement, or it might not have as much as \$50,000,000 to invest. Suppose, therefore, that, instead of providing one holding company, it provides ten, dividing the local operating companies among them, the aggregate capital of the ten companies being the same as in the preceding case and of the same proportional structure in common stocks, preferred stocks, and bonds. Now suppose that the promoters organize a super-holding company with a total capital of \$50,000,000 (the amount of the common stock of the ten subsidiary holding companies) consisting of \$25,000,000 of 6 per cent bonds, \$12,500,000 of 7 per cent cumulative preferred stock, and \$12,500,000 of common stock. The promoters furnish the common stock money, thereby retaining for themselves the entire voting power in the whole pyramid of companies and constituting themselves the ultimate beneficiaries of the group's earning power, and sell the other securities to the investing public. The \$20,500,000 of income left after paying interest and dividends on the bonds and preferred stocks of the operating companies and of the subsidiary holding com-

panies accrues to this super-holding company. Out of it, \$1,500,000 is required for interest on the super-holding company's bonds and \$875,000 for dividends on its preferred stock. This leaves \$18,125,000 for the common stockholders, or 145 per cent per year on the investment of \$12,500,000 made by these promoters.⁴

This illustration shows that a small group of promoters, by investing \$12,500,000, could gain control of \$1,000,000,000 worth of operating companies, and receive their money back $1\frac{1}{2}$ times each year—and the topmost holding company in this example is only of the second degree! By controlling more operating companies and carrying the holding company structure to greater heights, even better results could be obtained. Moreover, this illustration assumes that each successive holding company has acquired *all* the common stocks of lower companies, which would not be necessary for purposes of control. It also counts as profits of the topmost company only the income received indirectly from the operating companies' earnings. But holding companies also make profits from fees charged for various kinds of services performed for the operating companies. All in all, it is evident that the operations of holding companies may be very profitable to the "insiders."

The Duping of Investors. The above description suggests that when the business is profitable, the small group of common stockholders of the topmost holding company is in a position to get most of the cream. And, when the business is unprofitable, most of the loss is borne by the holders of the other securities, since they have furnished most of the invested funds. In this connection, it should be noted that holding companies have sometimes been guilty of unloading very poor securities on investors. A first-degree holding company holds as its principal assets the common stock of the operating companies which it controls. It has, then, a claim, partial or complete, on the residual earnings of these companies. On the basis of this stock, however, the holding company often sells one or more issues of bonds and possibly three or four issues of preferred stock, while retaining control in the hands of a small number of persons through ownership of the common stock, or such part of it as has voting power. The holding company may pay exorbitant prices for the stock of operating companies and then proceed to sell an amount of its own securities which is far in excess of the real value of the securities which it owns.

While there may be justification for the issuance of bonds by a first-degree holding company, the fact remains that, as bonds are issued by holding companies further and further removed from the operating companies, these "bonds" become distinctly less secure than the common stock of many industries. The same is true, and to an even greater extent, of the preferred stock of high-degree holding companies. Take, for example,

⁴ Senate Document Number 213, 68th Congress, 2nd Session, pp. 173, 174, cited in C. D. Thompson, *Confessions of the Power Trust*, pp. 181-183.

the case of a holding company of the fifth degree. Its assets consist largely of the stock of other holding companies. This stock represents a partial, residual claim, four times removed, on the residual earnings of the operating companies in the system. However attenuated this claim might seem to us to be, the fifth-degree holding company would often, upon the strength of this claim, issue securities which they called bonds, but which lacked almost wholly the certainty as to principal and interest which used to attach to securities bearing this name.

We see, then, that holding companies have sometimes issued securities, on the basis of fictitious asset values and paper profits resulting from stock dividends and other intercompany transactions, which did not truly represent the sums invested in underlying utility properties. These securities, issued merely on the hope of excessive income from subsidiaries, were likely to bring losses to investors. As one public utility company executive put it, "I know of no more reprehensible abuse than for speculators to buy up companies for high prices, put them into a holding company, and then, by trading on the credulity of the investing public relative to claimed increases in economy, to unload the holding company's securities at advanced prices and thus get completely out from under before the bubble is punctured, leaving the unfortunate final investor to face an angry consumer."⁵

Evils of Intercompany Relationships. Sometimes a holding company system has been so large that the top holding company, in addition to selling bonds and preferred stock, has had to sell part of its common stock to the public, leaving only enough in the hands of the insiders to enable them to control the system. In instances of this kind, the large profits left after paying bondholders and preferred stockholders, when business was good, had to be shared with these outside common stockholders. In such cases, but more particularly when the income arising from the subsidiary companies, though sufficient to pay bondholders and preferred stockholders, was not sufficient to pay large returns on common stock, those in control of the topmost company have sometimes found it desirable to tap the income of subsidiary companies at its source. This might be done in any of a number of ways.

Those in charge of the topmost holding company control the affairs of the subsidiary holding companies and the operating companies as well. They have the power to appoint, directly or indirectly, presidents and managers for the operating companies and determine their salaries. Often they have appointed themselves or their associates as officials of the subsidiary companies, at very choice salaries and occasionally with generous arrangements for pensions in their old age. Funds for these purposes came,

⁵ Samuel Ferguson, President of the Hartford Electric Company, in the *Electrical World*, March 20, 1926.

of course, from the payments made by consumers for the services of the operating utility companies.

Moreover, the men in control of the highest holding company often owned other companies which sold machinery, equipment, materials, and supplies, of the types required by the operating companies, or sold construction and engineering services. Hence, they were able to sell the operating companies commodities and services at virtually whatever prices they chose to charge. If, for example, the manager of a small electric company needed (say) a new dynamo for his plant, he would submit the matter to the manager of a holding company in another place. The holding company manager would tell him whether he could have the money for the operating company, how much he could have, just what he should buy with it, from whom he should make the purchase, and what price he should pay. This would often result in the equipment being purchased from a company owned by the men at the top, and at a price which they themselves fixed. If this company charged the local operating company too much for the equipment, nobody but the insiders would be any the wiser.

In these and other ways, those in control of a holding company system could often find ways to line their pockets without sharing the income of subsidiary companies with other people. The practice of charging exorbitant prices to operating companies for machinery and equipment was important not only from the point of view of "milking" the operating companies, but also because the rates the operating companies were allowed to charge were usually determined by public utility commissions on the basis of permitting these companies to earn a fair rate of return on the cost of the property of the companies used and useful in the public service. Hence, the rates paid by consumers might be unduly high because of the high prices paid by operating companies for equipment. Finally, it will be recollected that a major claim for the holding company is that it makes it possible for the operating companies to obtain capital which they themselves might not have been able to attract. However, this process has sometimes been reversed and the operating companies have been compelled, to their detriment, to make "upstream loans" to their holding companies.

Propaganda and the Control of Legislation. We must mention, also, as an evil related to holding companies, the extent to which these corporations have attempted to influence legislation in which they were interested. It was perhaps but natural that holding companies, in a country in which other large concerns or industries indulge in such practices, would try to influence legislation through lobbying, bribery, and other methods. These methods, however, were quite as likely to be used against legislation designed to correct evils of the holding company as in favor of that proposed for the benefit of holding companies and

operating companies alike. When the Holding Company Bill was before Congress in 1935, many holding companies spent large sums of money to defeat this measure. The funds were sometimes obtained through "contributions" made by the operating companies, or, again, came out of income received from operating companies in the regular course of business. In effect, then, the purchasers of utility services were paying to defeat a law intended, in part at least, to protect their interests as consumers. In addition to direct lobbying, the holding companies sought to induce security holders to write or telegraph their Senators and Congressmen urging the defeat of the bill. It was testified at a public hearing that public utility officials sent many identical telegrams denouncing this bill, signing them with names taken at random from telephone directories, and without the authorization of those whose names were used.

It has also been charged, and at least partly proved, that holding companies have conducted long and expensive campaigns of propaganda to influence public opinion in their favor. At times newspapers have been bought outright to insure favorable publicity for the industry. More often such publicity has been obtained through cordial relations established by heavy advertising in these newspapers. There is some evidence that college professors have been kept on public utility payrolls so that they might preach the gospel of the utilities; and the industry has also been successful in changing the content of some textbooks and inducing school authorities not to use others which contained unfavorable references to the industry. Utility companies have also been most generous in providing favorable materials about the industry for use in the schools.

The Question of Rates. Prominent utility officials have often contended that, whatever might be the evils of holding companies, the rates charged by operating companies to the consumers have not been adversely affected by holding company control. Since the operating companies are only allowed to charge rates which will produce a fair return upon a fair valuation of their properties, it is said to matter little to the consumers how thoroughly watered the securities of holding companies may be, or what happens to the income of operating companies once it is received. Indeed, these officials have contended that the progressive reductions which have taken place in public utility rates indicate the benefits to consumers of utility operation under the holding company system. There may be question as to how general these reductions have been, but there is no doubt that they have occurred in some cases. However, those which have occurred in some years must be discounted to a considerable extent as having possibly been produced by the threat of holding-company regulation, rather than by lowered costs.

In any case, the lowering of absolute rates means comparatively little. That is, the low rates charged today may be further above the cost of production than were the higher rates charged in previous periods. The

dealings of holding companies with their operating companies have been secret, and we have had no way of knowing whether the price paid for (say) electricity in a given community was, on the basis of costs or by comparison with the rates charged elsewhere by other operating companies under the same holding company control, a fair price.

We have now reviewed briefly the principal merits attributed to public utility holding companies, as well as the principal evils with which they are charged, and are in a position to examine and appraise the public utility legislation of 1935. At this point it is only fair to say that the evils pointed out have by no means been characteristic of all public utility holding companies. Some, indeed, have enviable records for fair dealing with both their subsidiaries and the public, but others have been guilty of most, if not all, of the malodorous practices that we have described.

THE WHEELER-RAYBURN PUBLIC UTILITIES ACT

The holding company situation in the public utility field was so serious, and the powers of the state governments to control these companies were so feeble, that in 1935 the federal government undertook to provide regulation through the Wheeler-Rayburn Public Utilities Act. This Act was in two parts: Title One or the Public Utility Holding Company Act, and Title Two or the Federal Power Act. In Title One, a holding company was defined as any company which has, directly or indirectly, 10 per cent or more of the voting control of a public utility company or another holding company. Holding companies were brought under the jurisdiction of the Securities and Exchange Commission, the provision being that every holding company which, on October 1, 1935, had outstanding securities offered since 1925 and owned to some extent in other states, must register with the Commission in order to remain in business. The Commission was empowered to exempt certain companies from registration under conditions too detailed to be described here. To secure registration, holding companies must produce full and complete information about their capital, resources, officers, and business. Periodic and special reports must be filed with the Commission.

Financial Matters. Several provisions of the Act are designed to correct specific evils that have marked the development and operation of holding companies. A uniform accounting system is prescribed for registered holding companies, and it is unlawful for any registered holding company or subsidiary company to acquire securities or capital assets of other companies without the approval of the S.E.C. The issuance of new securities by holding companies also comes under the jurisdiction of the Commission. Security issues must be well adapted to the financial structure of the issuing company and to its earning power; the financing must be necessary and appropriate to the economical and efficient operation of the business; fees and commissions in connection with the security issues must

be reasonable; in cases of guaranty or assumption, the risk must not be improper; and the terms of sale must not be detrimental to the interests of the public, investors, or consumers. The purposes of security issues must be approved by the S.E.C. No-par stock, preference stocks, and debentures may no longer be issued.

Holding companies and subsidiaries may not declare or pay dividends in violation of such rules as the S.E.C. may prescribe to protect the financial integrity of the system, safeguard working capital, or prevent payments out of capital or unearned surplus. The acquisition or redemption, by a holding company, of its own securities, the sale of its own securities or other utility assets, and the solicitation of proxies, powers of attorney, and the like, are prohibited except under rules set up by the S.E.C. Holding companies are forbidden to sell securities from door to door, and to require subsidiaries to sell holding company securities. "Upstream loans," from operating companies to holding companies, are prohibited and other loans are regulated.

Contributions of holding companies or subsidiaries to any political party or candidate are strictly prohibited. Utility lobbyists must register with the S.E.C., and disclose the subject matter on which they work, the fees they receive, and other specified information. Officers and directors of holding companies must file statements listing the securities of the holding companies and subsidiaries owned by them, and must make monthly reports of any changes in ownership. To prevent the misuse of inside information, profits realized by officers and directors from buying and selling such securities within any six-month period shall inure to, and be recoverable by, the companies, regardless of the intent of the officers and directors.

Other Intercompany Relations. Holding companies are no longer permitted to sell to operating companies directly, or through a subsidiary company, the various types of commodities and services which we have mentioned, at whatever prices they choose to set. On April 1, 1936, it became illegal for a registered holding company to enter into or perform any service, sales, or construction contract for an associated public utility company or mutual service company. A subsidiary of a registered holding company or a mutual service company may do these things only in accordance with the rules, regulations, and orders of the S.E.C., to insure that the contracts are performed at cost and that the burden of cost is fairly divided among the associated companies. Again, on August 26, 1936, it became illegal for a registered holding company or subsidiary to have, as an officer or director, any officer, partner, or representative of a bank, trust company, investment banking house, banking association, or firm, or of any corporation a majority of whose voting stock was owned by any bank, trust company, investment banker, banking association, or firm, except as the S.E.C. might permit.

The Act attempts to confine the activities of holding companies to the operation of gas and electric utilities and the holding of securities of such utilities. It is intended to prevent the indiscriminate combination of domestic and foreign utilities, and to prevent the use of the holding company to deny to the public the widespread and economical use of both natural gas and electrical energy, which are sometimes withheld merely because it is to the selfish advantage of a company to encourage the use of one of its products rather than another and deprive the public of the benefits of competition between the two.

The "Death Sentence" Clause. The most famous provision of the Holding Company Act was the one containing the so-called "death sentence" for public utility holding companies. This clause directed the S.E.C., after January 1, 1938, to require by order that existing utility holding company systems be limited to one such company, and one subsidiary holding company, and to prevent control by the two companies over more than one integrated system of operating companies. Thus, the "death sentence" applies to holding companies above the second degree. According to the Act, an integrated system of operating companies is a system of one or more units of generating plants, and/or transmission lines and/or distributing facilities, whose utility assets, whether owned by one or more companies, are physically interconnected or capable of physical interconnection, and which under normal conditions may be economically operated as a single interconnected and coordinated system, confined in its operation to a single area or region, in one or more states, and not so large as to impair (considering the state of the arts and the area or region affected) the advantages of localized management, efficient operation, and the effectiveness of regulation.

No exceptions are permitted as to the degree of the holding companies, but exceptions may be allowed in the number of operating systems to be controlled by the two holding companies in a system. Thus, more than one integrated operating system may be controlled whenever the Commission finds that such additional systems are incapable of economic independent operation, or operation without the loss of substantial economies not otherwise obtainable, when the additional systems are located in the same state or adjoining states, and when the continued combination of the operating systems is not so large as to impair the advantages of localized management, efficient operation, or the effectiveness of regulation. The burden of proof in each case is on the holding company.

The Welfare of Operating Companies and Consumers. In general, the regulatory provisions of the Act were directed at specific and well-known evils. The powers given the S.E.C. differed little from those already exercised by some public utility commissions. The Act has met with fairly general approval, though public utility officials feel that some of its provisions are too severe and delegate too sweeping powers to the S.E.C.

However, the "death sentence" clause was attacked from several angles, one of which related to the welfare of the operating companies and of the consumers. It was said that the destruction of the holding companies would ruin the industry because the operating companies were dependent upon the holding companies for expert managerial services, supplies, equipment, and capital. With the holding companies gone, the operating companies would have to depend upon their own resources and would be unable to operate with their customary efficiency. The result would be higher rates for consumers, or perhaps even the outright failure of operating companies and a growing need for government ownership. Indeed, it was sometimes charged that the aim of the Act was eventually to bring all public utilities under government ownership.

Supporters of the Act did not deny that many operating companies were dependent upon holding companies for capital, services, and commodities, and that the efficiency of these operating companies would be impaired if all holding companies were eliminated. They pointed out, however, that not all holding companies, but only those above the second degree, were to be dissolved. It is probable that operating companies already derived a major part of their benefits from holding companies of the first or second degree. Even if this was not true at the time, there seemed to be no reason why first- and second-degree holding companies should not be able, after a reasonable period of time, to furnish all essential capital, commodities, and services to the operating companies. If this development took place, holding companies above the second degree would perform no useful economic function, and their dissolution would not involve loss to the operating companies and consumers. According to William O. Douglas, former chairman of the S.E.C.: "To the extent that the holding company can justify its dominion in terms of service to the operating companies, the statute is not a 'death sentence.' On the contrary, it holds the promise of a long life and a happy one."⁶

Even though the holding companies of high degree may not be missed, it might be uneconomical to deprive a first- or second-degree holding company of all but one of its integrated systems of operating companies. But, as we have seen, a holding company may be permitted to continue its control over more than one system of operating companies, whenever such control is in the public interest. In other cases, holding companies must be reorganized, or new holding companies organized, so that only one system of operating companies will be controlled by each. Given a reasonable period of time, it should be possible to accomplish the necessary reorganization with a minimum of loss to those involved.

The Destruction of Investments. There were also many critics of the Act who contended that, while the dissolution of high-degree holding companies might be good riddance from the point of view of operating

⁶ *Electrical World*, May 14, 1938, p. 1604.

efficiency and consumer rates, their loss would be mourned by people who had invested in their securities. It was argued that the government, by forcing the liquidation of these companies, would destroy the investments of their preferred and common stockholders, if not those of the bondholders. Let us suppose that a third-degree holding company was forced to liquidate. This would mean disposing of its holdings of securities of other companies, and selling its other assets. Out of the proceeds thus realized, the company would first have to pay its bondholders in full, if possible, and there might be little or nothing left for the stockholders.

Supporters of the Act admitted that the investors in certain holding company securities were deserving of sympathy, for undoubtedly some of these "investments" had already lost their value completely, or almost completely. They contended, however, that the government was in no sense responsible for these losses to security holders. Rather, the responsibility rested with the holding company executives who had sold worthless or questionable securities at high prices in the gala days of 1929 and earlier. The solicitude of these executives for the security holders was touching, but untimely.

It seems apparent that many high-degree holding company securities had lost most if not all of their value before the Act was passed or was in any danger of passing. For example, shares of American Gas and Electric sold in 1929 for as much as \$225 per share and fell to \$18 $\frac{7}{8}$, and shares in Associated Gas and Electric, which had brought \$46, were later offered at 39 cents each. Of course, as utility executives claim, not all holding companies should be blamed for the misdeeds of the guilty, but in 1929 the control of about 40 per cent of the power industry was concentrated in the hands of three large groups—the Insull group, United Corporation, and Electric Bond and Share. The stock of these companies sold in 1929 for as much as \$79, \$75, and \$189, respectively, and during the depression went as low as 0, \$1 $\frac{1}{2}$, and \$3 $\frac{5}{8}$ per share, respectively.

Since the shares of many holding companies had dropped, before holding company legislation became at all imminent, to a figure which was only one to 5 per cent of their former values, the advocates of the law suggested that something more than the prospect of adverse legislation had depressed their values. They suggested also that the holding company officials, who were weeping bitterly over the prospective fate of the utility investor at the hands of a cruel government, might be shedding crocodile tears. The man who bought the stock of a high-degree holding company at \$75 a share, and watched it fall to \$1.50 under a governmental policy of "hands off," was not likely to be greatly impressed by the charge that the government, through the operation of the Public Utilities Act, was about to destroy the value of his shares.

Let us see how the Act is likely to affect the owners of securities. If we are correct in assuming that, after a period of reorganization, all holding company functions contributing to the efficiency of operating companies can be performed by first- and second-degree holding companies, those who hold the securities of the operating companies should not suffer through the operation of the Utilities Act. Similarly, the holders of the securities of first- and second-degree holding companies should not be affected adversely, since those which are sound and perform a useful economic function will not be dissolved.

We may agree that the holders of stock in high-degree holding companies are in an unfortunate position, while denying vigorously that this situation is attributable to the Utilities Act. Rather, the losses that the stockholders suffer will have resulted chiefly from the fact that they were inveigled into paying very high prices for stock which was essentially and inherently unsound. In other words, they were sold securities whose total price was far in excess of the value then existing or probable future value of the assets of the high-degree holding companies whose stock they bought. The Utilities Act must indeed be embarrassing to the gentlemen who foisted these securities on the public, but such embarrassment scarcely constitutes a valid criticism of the Act.

Enforcement of the Public Utilities Act. The constitutionality of the Act was strongly challenged in the courts. When the time came for holding companies to register with the S.E.C., many refused to do so until the constitutionality of the Act had been determined. In February, 1938, it was estimated that holding companies controlling 56 per cent of the assets of utility companies subject to federal regulation had failed to register.⁷ In March, 1938, the Supreme Court ruled that the registration provisions of the Act were constitutional. The Court held that the holding company involved in the suit in question was clearly, though to some extent indirectly, engaged in interstate commerce, and that, equally clearly, the registration provisions of the Act came within the power of Congress to regulate interstate commerce.

Following this decision, several important holding companies hastened to register, but the constitutionality of the "death sentence" feature of the Act remained in doubt. This part of the Act was to be enforced as soon as possible after January 1, 1938, but the S.E.C. delayed its enforcement because of the uncertain status of the Act. In August, 1938, the S.E.C. set December 1, 1938, as the final date for the submission of reorganization proposals by all companies under the "death sentence" clause. On that date, the Commission announced that public utility holding companies representing "substantially 100 per cent" of the assets of the industry had furnished it with plans for simplifying their corporate structures, as required by the Act.

⁷ *The Chicago Tribune*, February 25, 1938.

By June 30, 1945, considerable progress had been made in carrying out the "death sentence" clause. A total of 146 plans for simplifying the corporate structures of public utility holding companies had been filed with the Commission. Of these, the Commission had approved 56, frequently after securing necessary modifications; 23 had been withdrawn or dismissed; 3 had been denied; and 64 were pending in various stages of completion.⁸ Public utility holding companies had already divested themselves of 342 electric, gas, and other companies with total assets of \$4,347,000,000; and integration orders outstanding required the divestment of holding companies' non-retainable interests in 147 subsidiary companies having aggregate assets of \$4,352,000,000.⁹ The Commission had issued 46 orders involving simplification of corporate structures and equitable redistribution of voting power, and there were 47 such proceedings pending.¹⁰ Altogether there were 63 cases pending as of June 30, 1945, involving 33 holding company systems, 92 holding companies, 768 operating companies, and aggregate assets of \$13,601,872,095.¹¹

Finally, the United States Supreme Court reached a decision on April 1, 1946, which declared the "death sentence" clause to be constitutional. The decision was written in a case involving the North American Company, which was the top holding company in a system containing 80 operating companies in seventeen states and the District of Columbia, and which had been ordered to confine its operations to a single integrated system built around the Union Electric Company of Missouri. The North American Company had contended that the ownership of securities is not in itself interstate commerce and hence could not be made the basis of federal legislation. The Supreme Court replied that Congress could protect the freedom of interstate commerce by any means that were appropriate, lawful, and not prohibited by the Constitution, and that previous decisions of the Court had recognized that Congress could deal with and affect the ownership of securities in order to insure the freedom of commerce. The North American Company had also contended that the "death sentence" clause was unconstitutional, as applied to the company, since none of the evils that led Congress to enact the statute was actually present in the affairs of this company. However, the Supreme Court replied that, if evils had disclosed themselves which entitled Congress to act as it did, the Congress had power to legislate generally, unlimited by proof of the existence of the evils in each particular situation. With the question of constitutionality out of the way, the reorganization and adjustment of holding companies in conformity with the "death sentence" clause proceeded briskly in 1946 and 1947.

⁸ *Eleventh Annual Report of the Securities and Exchange Commission*, Philadelphia, 1946, p. 36.

⁹ *Ibid.*, pp. 35, 37.

¹⁰ *Ibid.*, p. 35.

¹¹ *Ibid.*, p. 36.

The Federal Power Commission. Title Two of the Public Utilities Act of 1935 gave important powers to the Federal Power Commission. This body had been created in 1920 by the Federal Water Power Act. In the first fifteen years of its life, its activities were limited to licensing water-power projects for electrical development, regulating the accounting of such projects to prevent overcapitalization, and making power and electric rate surveys. The Act of 1935 gave the Commission regulatory powers over all facilities used for the transmission and sale of electric energy in interstate commerce, and over the sale of electric energy at wholesale in interstate commerce. The Commission was directed to divide the country into regional power districts, and to encourage interconnection and coordination of facilities within each district and between districts. Upon application of any state commission or person engaged in the transmission of electric energy, the Commission may direct a public utility (if it finds that no undue burden is thereby placed upon the utility) to connect its electric transmission facilities with those of one or more persons engaged in the transmission or sale of electrical energy, and to sell energy to or exchange energy with such persons. However, the Commission may not require the extension of generating facilities for these purposes or compel any utility company to exchange or sell energy when to do so would interfere with its ability to provide satisfactory service to its regular customers.

In case of war or a shortage of electric power or facilities, the Commission may, upon its own motion or by request, compel a temporary connection of facilities and such generation, exchange, or transmission of power as in its judgment will best provide for the emergency and care for the public interest. For interstate purposes, the Commission has powers of control over electric utility companies similar to the powers of the S.E.C. over holding companies. That is, it controls interstate wholesale electric rates, the acquisition and sale of properties, the issuance of securities, and accounting methods. This part of the Public Utilities Act of 1935 aims to correct a weakness in the state public utility regulatory systems. In 1938, the Flood Control Act gave the Commission considerable authority in planning electric power developments at flood control dams, and in the same year the Natural Gas Act directed the Commission to regulate the transportation and sale of natural gas in interstate commerce.

THE TENNESSEE VALLEY AUTHORITY

The Nature of the T.V.A. The public utility industry, in addition to its worries over the Public Utilities Act, has been much concerned about governmental competition in the production and sale of electric power. While the federal government has been building dams and faciili-

ties for the production of electric power in many parts of the country, the chief concern of the industry has been the activities of the Tennessee Valley Authority. The T.V.A. is a corporation controlled by a board of three directors appointed by the President. It was organized in 1933, for the purpose of developing the Tennessee River Valley area. In 1934, when the T.V.A. project included six dams, with electric plants and transmission lines, it was estimated that the total cost would be \$310,000,000. By 1947, however, the project had expanded greatly and the total proprietary interest of the United States in the T.V.A. (including funded debt, direct appropriations, and transfers from the War Department) amounted to \$763,000,000.¹²

The public utility industry is interested in the T.V.A. because all the dams that are constructed are equipped to produce electric power, which is sold in competition with the electricity sold by the privately owned utility companies. For example, the T.V.A. claimed a net income of over \$16,000,000 from sales of electric power in 1946.¹³ It is frequently contended that the primary purpose of the T.V.A. is to produce and sell electric power. According to T.V.A. authorities, however, this is but one purpose among many. Other interests are flood control, the improvement of navigation, the production of fertilizer and explosives, and the rehabilitation of agriculture. So far as electric power is produced, it has been held that the T.V.A. power plants are used as "yardsticks" to determine how cheaply electric power can be produced and transmitted, and in this way to find out whether existing rates in the district are fair and reasonable. It is also suggested that, though private companies have had to lower their rates for electricity because of T.V.A. activities, consumption has been increased so greatly that these companies now make larger net earnings than in the past.

Criticisms of the T.V.A. The critics of the T.V.A. assert that the project is designed almost solely for the production and sale of electricity in competition with the output of private companies. They point out that the T.V.A. has erected thousands of miles of transmission lines, and that it serves scores of communities and tens of thousands of industrial consumers. They point out, further, that the electric plants of the T.V.A., when completed, will produce about half as much power as is now sold in the seven states affected by the project, and that the T.V.A. has acquired more than \$110,000,000 worth of electrical facilities from private companies.¹⁴ Citing these facts and reports that other projects similar to the T.V.A. are to be started, the critics conclude that the private electrical industry is to be destroyed, and government ownership substituted.

In allocating the costs of the total project among the major objectives

¹² *Public Utilities Fortnightly*, January 30, 1947, p. 172.

¹³ *Ibid.*, p. 173.

¹⁴ C. W. Thompson and W. R. Smith, *Public Utility Economics*, p. 696.

—flood control, navigation, and power production—it has been decided that 59 per cent of the costs should be charged against power facilities.¹⁵ But critics contend that this is an underestimate of the cost of these facilities, and that the dams could have been built for far less if they had not been designed for the production of electric power. To allocate too little cost to the construction of power facilities would be, of course, to lower artificially the cost of power production at the T.V.A.

It is charged that the use of the T.V.A. plants as yardsticks is unfair to the private companies, not only because of an artificially low estimate of original costs, but also because they are unlike the private plants in the extent of industrial and residential use, load factors, taxes, interest, and depreciation charges. For example, it is said that the T.V.A. in 1946 made depreciation charges substantially lower than those of private companies, set aside amounts in lieu of taxes which were about one-fourth of what private companies would have paid, and took no account of interest on government funds, which would have amounted to \$12,920,000 even at the rate of 1.936 per cent which the government was currently paying on the average.¹⁶ To have to compete with T.V.A. rates, in the face of such fundamental differences, places the private companies at a hopeless disadvantage, it is argued. The T.V.A. is also criticized because its operation has deprived federal, state, and local governments of some 4½ million dollars of taxes which used to be paid by public utility companies, and because its power is purchased largely by a few large industrial consumers instead of benefiting the general consuming public of the area.

Accomplishments of the T.V.A. Our criticisms have dealt with the T.V.A. as a producer and marketer of electricity, and we should say at this point that some of the other T.V.A. projects deserve somewhat more favorable comment. The average annual flood damage along the Tennessee River was estimated at \$1,780,000 before the T.V.A. dams were built,¹⁷ and even this figure did not take into account loss of life, disruption of transportation and business, and the diversion of land to low-value uses because of the danger of flooding. The T.V.A. dams permit flood waters to be stored up in great lakes and to be released gradually later on, with the result that flood damage in the area has been largely eliminated. The T.V.A. has also achieved some success in its attempts to improve farming methods in the area and to increase the use of commercial fertilizers. It has demonstrated and advocated changed methods of hillside cultivation, the use of new farming equipment, and the growing of crops that

¹⁵ *Public Utilities Fortnightly*, January 30, 1947, p. 173.

¹⁶ *Ibid.*, p. 173.

¹⁷ Emory Troxel, *Economics of Public Utilities*, New York, Rinehart and Company, Inc., 1947, p. 693.

restore nitrogen to the soil. The farm rehabilitation program has also included the production and distribution of superphosphate.

Other accomplishments claimed for the T.V.A. are more questionable. The consumers of the Tennessee Valley region have benefited directly through lower rates for electricity and indirectly through lower prices of goods produced with the aid of electric power, but we must remember the common charge that these advantages are available to the consumers only because they have been subsidized by the taxpayers of other regions. The T.V.A. provides a nine-foot navigation channel from Knoxville to Paducah, a distance of 650 miles; and water connections with the Mississippi River system, the Ohio River system, and the Illinois waterway are available. However, we do not know whether the volume of traffic on the Tennessee waterway will ever come close to the expectations of the sponsors of the project, whether any transportation benefits which result will be enjoyed in the last analysis by the consumers of commodities or by industrial corporations and the owners of coal mines, or whether transportation on the Tennessee waterway will really be cheap or costly. In the preceding chapter we noted that transportation on inland waterways is often very expensive when all the costs of such transportation are measured and included. Finally, the economic development of the Tennessee Valley region has been desirable, but we can never be certain just how much of it should be credited directly to the T.V.A. or how its cost would compare with that of the development which would have occurred naturally, though somewhat more slowly.

Constitutionality of the T.V.A. In view of these criticisms, it is not surprising that utility companies have objected strenuously to the activities of the T.V.A. Indeed, some eighteen utility companies in the southeastern part of the country brought suit, asking an injunction against the sale of power by the T.V.A., on the ground that their business was threatened with irreparable injury, if not destruction. The case came to a decision in a Federal Court in Chattanooga, Tennessee, in February, 1938. The court decided in favor of the T.V.A., holding that the utility companies have no immunity from lawful competition, even if their business is curtailed or destroyed. The judge decided that the T.V.A. dams were constructed for several other purposes—including navigation, flood control, and national defense—as well as for the development of electricity. The water stored by these dams, when allowed to pass through turbines, creates electric power. This power is the property of the federal government, and the Constitution empowers the government to dispose of its property in any way it may choose. The utility companies immediately took an appeal to the Supreme Court, which refused to reverse the decision of the district court.

1. Why are some businesses called "public utilities"? Explain.
2. Why has it been thought necessary for the government to regulate public utilities?
3. How have our courts restricted the power of public utility commissions to regulate the rates charged by utility companies?
4. Why is the valuation of public utility properties necessary? What problems arise in connection with valuation?
5. What is meant by the prudent investment cost method of valuation? Explain fully.
6. Is either the total par value or the market value of the stock of a utility company a sound measure of the value of its property? Why?
7. What problems are encountered in attempting to find the original cost of a utility company's properties? Explain.
8. Do you prefer reproduction cost or original cost as a method of public utility valuation? Explain.
9. What difficulties arise in attempting to establish a fair rate of return? Explain.
10. Is any principle of rate regulation feasible other than the "fair return on a fair valuation"? Explain.
11. "Despite regulation by public utility commissions, many evils have continued to exist in the public utility industry." Explain the nature of these evils.
12. What have been the principal weaknesses of public utility commissions?
13. How have two developments of fairly recent years still further impaired the ability of state commissions to regulate the utilities?
14. What is a public utility holding company?
15. How do holding companies perform certain financial functions for their operating companies? Explain.
16. What other functions are performed by holding companies for operating companies.
17. What is meant by the pyramiding of holding companies?
18. How are power and profits concentrated in the hands of a few individuals through the use of holding companies? Explain fully.
19. In what ways have holding companies sometimes been guilty of duping investors?
20. How have evils existed in the relations between holding companies and their subsidiaries? Explain.
21. How have holding companies attempted to influence legislation and public opinion?
22. What were the purposes of the Public Utility Holding Company Act of 1935?
23. How is the Securities and Exchange Commission expected to control the financial operations of holding companies under this Act? Explain.
24. How are intercompany relations regulated by the Act?
25. What is meant by the "death sentence" clause?
26. Will the welfare of operating companies and consumers be adversely affected by the enforcement of the "death sentence" clause? Explain.
27. Has the government, through the "death sentence" clause, destroyed the investments of the holders of securities of high-degree holding companies? Explain.

28. To what extent had the "death sentence" clause been enforced up to June 30, 1945?
29. On what grounds did the Supreme Court decide that the "death sentence" clause was constitutional? Explain.
30. Explain the provisions of the Federal Power Act of 1935.
31. What is the T.V.A., and how is it related to the public utility industry?
32. Discuss the controversy which has been raging over the activities of the T.V.A.

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Monopolies

IN MANY INDUSTRIES, THOUGH NOT IN ALL, ECONOMIES MAY BE BROUGHT ABOUT through large-scale production. But even in fields where the economies of large-scale production are great, a single firm may grow to a point beyond which no economies in actual operation of the plant would result from a further increase in size—although greater size might be desirable from the point of view of efficient marketing of the product, economical financing, or bearing the risks of the business. Under such conditions, it often happens that several business plants are brought under one central control, so that all may be managed as a single business unit, though each plant is limited to the size at which it can produce most efficiently.

But the process of centralization of control need not stop here. One firm, or a group of firms, sometimes increases in size until it controls so large a part of the capacity of a whole industry that it can regulate the output of the industry sufficiently to exercise control over the price charged for its product. In such cases, whether the control over productive capacity and price is complete or incomplete, a condition of effective monopoly exists.

Combinations and Monopolies. At the outset of our discussion, we must distinguish carefully between monopolies and ordinary business combinations. A business combination, whether horizontal or vertical, may be formed in any industry without a monopoly resulting, so long as the combination controls only a relatively small part of the total output of the industry. On the other hand, a monopoly situation may arise through the growth of a single firm, or through a trade association of several otherwise independent firms, without any actual combination of business units taking place. It follows that what is true of a combination is not necessarily true of a monopoly. A combination may be a sound and desirable economic development, while a monopoly is neither of these things. Similarly, a business combination may increase its gains by effecting real economies in production rather than by charging exorbitant prices or practicing unfair tactics toward its competitors, but this is not the method used by monopolies.

In referring to a monopoly, therefore, we shall have in mind a person, firm, combination of firms, association of firms, or simple group of firms, which owns or controls a sufficient part of the productive capacity of an

industry or business to enable it to control the price or prices charged by the whole industry or business for its product or products. It is impossible to say exactly what percentage of the productive capacity of an industry must be controlled in order to fix prices, for the percentage would vary considerably from one industry to another; but it is certain that monopoly powers can often be exercised by an organization which controls far less than 100 per cent.

We shall limit our present discussion to industrial monopolies. Public utilities, such as water, gas, and electric companies, were treated in the preceding chapter. These public utilities have long been recognized as "natural monopolies," that is, as businesses which can attain maximum efficiency only if given monopoly control and which, if organized competitively, would eventually turn into monopolies. Hence, public utilities have been permitted to operate as monopolies under governmental control. The railroads, which were also discussed separately, are more like public utilities than like ordinary industrial companies and have been accorded special treatment by the federal government.

THE DEVELOPMENT OF THE MONOPOLY PROBLEM

For many years, the existence of monopoly conditions in an industry usually meant that the field was dominated by a single large firm or by a gigantic formal combination of firms. Though monopolies in this sense existed in the United States as early as the middle of the nineteenth century, the most active period in their organization was from 1887 to 1903. The early monopolies took several forms, some of which we shall describe briefly.

The Pool. One of the earliest types of monopolistic organization was the pool, which consisted of a group of firms combined for certain purposes, although they remained independent in other respects. As to method of operation, pools were of several types. The most common types divided total output, markets, or profits among the member firms according to some prearranged plan. In general, pools were not a very successful type of monopolistic organization. Soon after a pool was formed, the individual members, or some of them, usually succumbed to the temptation to make a little money on the side by violating the pool agreement. This often meant the end of the pool, for the agreement among the firms was not enforceable at common law, since it was an agreement in restraint of trade.

The Trust. Another early form of monopolistic organization was the trustee device, or trust. The stockholders of the combining corporations would assign their stock with voting power to a board of trustees, and receive in return trust certificates representing the value of their properties. By holding a majority of the voting stock of the various com-

panies, the board of trustees could elect the officers of these companies and control them as a unit with respect to production and prices. The board would collect dividends on the securities held in trust, and distribute them among the owners of the trust certificates. The Standard Oil Trust, first organized in 1879, was an outstanding example of the use of the trustee device. This method of organization was attacked in the courts of several states and was declared illegal, both as tending to create monopolies and as representing unauthorized activity on the part of the individual corporations.

The Extent of Early Monopolies. Regardless of types of organization, monopolies of one kind or another controlled some 40 per cent of all manufacturing capital in the United States in 1904. Many of these monopolies were incomplete, some did not last long, and others turned out disastrously from the financial point of view; but in 1904 there were 26 monopolies which controlled 80 per cent or more of the production in their respective fields. The products affected ranged all the way from asphalt, bathtubs, and bicycles, at one end of the alphabet, to tin cans, whiskey, and window glass, at the other. Moreover, there were at least eight concerns which controlled 90 per cent or more of the production of some or all the articles which they produced.¹ These companies were the American Can Company, the American Sugar Refining Company, the American Tobacco Company, the Corn Products Refining Company, the International Harvester Company, the National Cash Register Company, the Standard Oil Company, and the United Shoe Machinery Company. Most of these companies were able to make extremely large earnings on their investments.

Modern Monopolies. Numerous cases of complete, or almost complete, control of industries by single companies have recently been cited. For example, it was said a few years ago that "one company in each field controls all or nearly all, of the nation's supply of aluminum, nickel, molybdenum, magnesium, shoe machinery, glass container machinery, and scientific precision glass, provides nearly all of the domestic telephone service . . . and operates all of the sleeping and parlor cars."² The companies involved were the Aluminum Company of America, the International Nickel Company, the Climax Molybdenum Company, the Dow Chemical Company, the United Shoe Machinery Company, the Hartford-Empire Company, the Bausch and Lomb Optical Company, the American Telephone and Telegraph Company, and the Pullman Company.

In other cases, "pairs" of firms control all or nearly all of the supply of certain economic goods. Examples are the United Fruit Company and the Standard Fruit and Steamship Company in the importation of

¹ Temporary National Economic Committee, Monograph No. 21, *Competition and Monopoly in American Industry*, Washington, Government Printing Office, 1940, p. 65.

² *Ibid.*, p. 69.

bananas; the Pittsburgh Plate Glass Company and the Libbey-Owens-Ford Glass Company in the production of plate glass; the General Electric Company and the Corning Glass Works in the production of glass bulbs, glass tubing, and rod for electric lamps; the General Electric Company and the Westinghouse Electric and Manufacturing Company in the production of metal bases for electric lamps; the International Business Machines Corporation and Remington-Rand, Inc., in the production of electric accounting machines; the Westinghouse Air Brake Company and the New York Air Brake Company in manufacturing railroad air brakes; the Union Carbide and Carbon Corporation and the Air Reduction Company in producing compressed oxygen and acetylene; and the Texas Gulf Sulphur Company and the Freeport Sulphur Company in sulphur production.³ All these examples relate to the national market of the United States. There are many other cases in which single firms or pair of firms control regional or local markets for various kinds of economic goods.

Conditions of effective monopoly may also exist in industries in which no single firm or pair of firms controls all or almost all of the output. Of the 1807 products studied from among those included in the Census of Manufactures for 1937, there were 291 in which the leading single company controlled between 50 and 75 per cent of the total supply. In the case of 37 products, four firms accounted for the entire supply. In 164 cases, four firms produced over 90 per cent of the supply; and in 328 other cases, the part produced by the four leading firms was not disclosed (in order to prevent the identification of individual firms). There were 670 products in which the four leading concerns turned out 75 per cent or more of the supply, or in which information on this point was withheld. The general conclusion was that from two-fifths to one-half of the goods under consideration were produced in fields in which four concerns controlled 75 per cent or more of the supply.⁴

Holding Companies. In industries in which the greater part of the supply of some economic good is controlled by a few large concerns, these firms are usually combinations of formerly independent companies. In many cases, the large firms are holding companies which exist for the purpose of owning and controlling the securities of other corporations. With their own securities or with cash, they buy up at least a controlling interest in the voting stock of the corporations which are to be combined, and thus are able to control management, output, and prices. The holding company is very similar to the old trustee device, the securities of the holding company taking the place of the trust certificates and the board of directors of the holding company superseding the board of trustees. However, since many states have passed laws authorizing the exist-

³ *Ibid.*, pp. 98-110.

⁴ *Ibid.*, pp. 113-118.

once of holding companies, this device is not automatically illegal, as was the old trustee device.

Mergers. The merger is somewhat similar to the holding company. While the holding company controls several business firms through security ownership, the merger exercises the same control through holding the physical properties of the various firms. In some instances, several corporations lose their identity in a new corporation which is organized to manage all the properties of the old firms. In other cases, one of the old corporations remains in existence and the others are merged in it. Like the holding companies, mergers are not illegal in and of themselves. The existence of one or more holding companies or mergers in a particular industry does not necessarily mean a condition of effective monopoly.

Price Leadership. Price leadership is an informal method of control. In industries in which the firms have heavy fixed costs, price-cutting is an extremely dangerous practice, especially if consumers can readily postpone their purchases. Each of the large companies knows that a price cut on its part would be swiftly followed by similar cuts by other large competitors, to the detriment of all companies concerned—and so prices tend to be maintained by the large companies, with some one company serving as the price leader. The numerous small companies which may exist in the same industry usually follow faithfully the price leadership of the large company or companies, either because they fear reprisals if they cut prices or because they believe their economic welfare will be enhanced by following the leader. In such industries, price changes seldom occur, and when they do they are introduced by all firms at about the same time. Evidences of price leadership have been found in industries producing anthracite coal, packer cans, corn products, fertilizer, canned salmon, industrial alcohol, steel, cement, agricultural implements, gasoline, non-ferrous metals, newsprint paper, glass containers, and biscuits and crackers.⁵ Since price leadership involves no actual agreement or conspiracy among the firms, it is very difficult to combat.

Price Agreements. When the sellers in an industry are relatively few they may enter into actual agreements to establish and maintain uniform prices and terms of sale. Price maintenance may also result from the activities of trade associations, but we refer here to price agreements between firms which are otherwise unassociated in their respective industries. Agreements of this kind are in open violation of anti-trust laws which forbid conspiracies in restraint of trade. During the past twenty years many court decisions have been handed down against firms maintaining price agreements.

Basing-Point Systems. In some industries a system of "delivered prices" is maintained through the use of one or more "basing points." When several basing points are used, all firms in a given district charge their

⁵ *Ibid.*, p. 123.

customers a uniform base price, plus freight from the basing point to the customer's geographical location. Frequently the actual freight from seller to customer is less than that from the basing point to the customer, and the difference goes into the seller's profit. Plants located outside a given basing-point district must ordinarily charge the same prices as those inside the district, when making sales in that district, and absorb the higher freight charges as best they can. Thus, a customer in a given district would be quoted the same price by all plants in the district, and by plants outside the district as well, so that price competition is eliminated. The firms which operate basing-point systems often claim that these uniform prices are only "asking prices," and that actual prices charged and received may differ somewhat from one firm to another. Basing-point systems have been used in the steel industry, the cement industry, and some 50 other industries.

Patent Pools. Effective monopoly has been maintained in some industries by means of patent pools. When important patents are owned by a small number of large firms, each firm may grant licenses to the others to use its patents, or all firms may pool their patents. This group of firms may then use its resources to exclude new producers from the general field of production, by refusing to grant licenses to outsiders or by charging very high royalties for the use of patents. When licenses are granted to new firms, the members of the pool may attempt to control output, markets, or prices charged by such newcomers. Patent pools do not always lead to effective monopoly, but the courts have found patent-pool monopolies among producers of ophthalmic lenses, porcelain insulators, radios, and gasoline.⁶

Other Control Methods. In addition to the methods of maintaining effective monopoly which have already been described, market-sharing is sometimes practiced by the few large firms in a given industry. Market-sharing means simply that the firms do not compete against each other for the same customers. Each firm has a particular share of the general field, and works it exclusively. Market-sharing seems to be common among investment bankers, has been practiced by meat packers and anthracite coal producers, and is said to have been used in the tobacco industry, at least in the marketing of certain products.⁷ Again, control in some industries has been achieved through interlocking directorates, stock ownership, financial relationships of the firms with a common financial organization, and in other ways.

Trade Associations. Formal organizations of firms in modern industry usually take the form of trade associations or industrial institutes, which are voluntary, mutual benefit associations having as their members the various business firms in a certain trade or industry. A trade association

⁶ *Ibid.*, p. 159.

⁷ *Ibid.*, p. 176.

may be incorporated or unincorporated. It is usually controlled by a board of directors elected by the members and is financed by dues. The members are independent in most respects and may ordinarily enter or leave the association at will. Trade associations have many legitimate fields of activity, such as "cooperative industrial research, market surveys, the development of new uses for products, the provision of traffic information, the organization of employment bureaus, collective bargaining with organized labor, mutual insurance, commercial arbitration, the publication of trade journals, joint advertising and publicity, and joint representation before legislative and administrative agencies."⁸

But their activities may also include "the establishment of common cost accounting procedures; the collection and dissemination of statistics; the operation of price reporting plans; the standardization of products, terms of contracts, price lists, and differentials; the provision of credit information; the interchange of patent rights; the administration of basing-point systems, the joint purchasing of supplies, and the promulgation of codes of business ethics; each of them practices which may operate to restrain competition in quality, service, price, or terms of sale."⁸ There were in 1940 some 2000 trade associations of national scope in the United States, hundreds of which have been involved in anti-trust proceedings of one kind or another.

THE CASE AGAINST MONOPOLIES

The Efficiency of Monopolistic Concerns. While cases of complete monopoly in the hands of a single company are rare in the American economy, there are many cases in which a single firm, or small group of large firms, controls a sufficiently large part of an industry to give it effective monopoly control. The attitude of most people toward complete and partial monopolies has for many years been one of acute distrust and opposition. Though not all monopolies have been successful, many have been highly so, and in most cases the reason for success seems to have been the control over production and prices, rather than any unusual economies in operation or elimination of waste. The advantages of large-scale production are many and well known, but most of them reach a limit rather quickly, and do not go on increasing indefinitely as a firm grows in size. Monopoly control is not required in order to reap these advantages.

Other advantages, not available to a single large-scale firm, may be enjoyed by certain types of business combination. They may avoid competitive duplication of plant, and of advertising and selling effort. They can eliminate a large number of competing brands, and avoid "cross-hauling" by filling each order from the nearest plant. When a period of

⁸ *Ibid.*, p. 226.

poor business hits an ordinary industry, it may be necessary for all plants to run at part capacity, and thus run inefficiently. A combination, however, can often close some plants completely and keep others running efficiently at full capacity. The several plants controlled by a combination may be made to specialize in different phases of its production, and rivalry between plants may be used as a stimulus to greater efficiency. Finally, any new processes or machines owned by any one of the firms may be used by all when all are members of a combination; otherwise, each plant would usually have its own trade secrets and special methods, and no one plant would have access to all of the best methods of production. This list of advantages, though not exhaustive, is imposing; but a few moments' reflection will convince the reader that a business combination need not be a monopoly in order to enjoy these advantages. Little statistical evidence is available as to the costs of production of monopolies, but the little that we have suggests that these costs are very seldom much lower than the costs of independent concerns or of combinations which lack monopoly powers.

Monopoly Prices. Since monopolies may claim but few, if any, economies as distinctly their own, it is evident that their success has almost always been due to restricting output and charging monopoly prices. The result has been large profits at the expense of consumers. It is, of course, very difficult to determine the exact effect of monopoly control over prices. To do this, we should have to compare the monopoly price with the price which would have prevailed under competitive conditions. Since there is no way to determine the latter, this comparison cannot be made. We know, however, that the prices charged under monopoly have usually been sufficiently high to yield large profits. It is true, as some defenders of monopolies have said, that prices in certain controlled industries have been stable or have even declined at times, but it is also true that monopoly profits may be gained without price increases. A stable price will yield large profits if it is high enough in the first place, or if it is accompanied, over a period of time, by falling costs of production. Even a falling price over a period of time will be highly profitable if costs fall more rapidly than the price itself.

The profits made by monopolies are a fair indication of the effect of monopoly control upon prices. For example, among the early trusts, the original Standard Oil Company had earnings which ranged between 48.8 and 84.5 per cent on its investment, and averaged 61 per cent between 1896 and 1906.⁹ The Aluminum Company of America made a net income of \$335,000,000 over a fifty-year period, though its original investment was only \$2,000,000.¹⁰ Among the two-firm monopolies, the Texas Gulf Sulphur Company had an average annual profit of 28.75 per cent on its

⁹ *Ibid.*, p. 66.

¹⁰ *Ibid.*, p. 72.

investment from 1919 to 1938, and paid dividends over a period of eighteen years which averaged 95.46 per cent annually on the original value of its stock; and the Freeport Sulphur Company, over a period of twenty-five years, has paid average annual dividends of 24.75 per cent on the ledger value of its stock.¹¹ It is clear that such profits can be made only from prices which are well above the cost of production level, whatever may happen to the absolute level of the prices. From the point of view of society, then, one of the principal objections to monopoly is its effect on prices and the burden thus placed on the consumers of monopoly products.

Unfair Tactics of Monopolies. When the smaller firms in an industry operating under monopoly conditions have refused to cooperate with the monopolistic firms, or when new competition has sprung up, the monopolistic firms have often resorted to unfair tactics to attain their ends. These monopolistic firms, with large or national markets, have often engaged in local price-cutting. That is, in areas in which they have had competition, they have cut prices to the cost level, or even below cost if necessary, in order to force their competitors to take losses. Meanwhile, they themselves have been able to "break even" or make money by continuing to charge high prices in non-competitive areas. The Standard Oil Company was a notorious follower of this policy of "cut-throat competition," but there were many others.

Firms that controlled a tremendous volume of business were once able, by playing one railroad against another, to secure rebates on freight rates, or to induce the railroads to establish particularly favorable rates out of the cities from which these firms shipped most of their products. The Standard Oil Company once made an arrangement whereby it not only received a substantial rebate on its own shipments, but also received a similar sum from the freight payments made by its competitors. The unfairness of such a policy is apparent.

Monopolistic firms have sometimes ordered dealers selling their products to refrain from handling the products of competing companies, thus limiting the market open to competitors. The International Harvester Company, among others, used these "exclusive dealer arrangements." A similar device was the "tying contract." The United Shoe Machinery Company, for example, leased indispensable machines on which it held patents, but required the lessee to contract also for the use of other machines on which the patents had expired, and which were offered by other firms at lower figures. In this way, the company forced shoe manufacturers to use its machinery exclusively, and thus destroyed competition.

Sometimes, monopolistic firms have interfered with the flow of services and supplies needed by their competitors. They have persuaded or forced banks to cut off credit, and to call in the loans of competing firms, and have led newspapers and periodicals to refuse competitive advertising.

¹¹ *Ibid.*, p. 110.

Railroads have been induced to develop sudden "shortages" of freight cars of the necessary type; and sellers of raw materials have been persuaded not to fill the orders of competitors, or to fill them with inferior materials or only after long delay.

When public feeling against certain monopolies has run high, they have often made it appear that firms under their control were independent. Those who might refuse to buy from the monopoly would buy from those "bogus independents," and these companies could compete with the genuine independents without their fraudulent nature becoming known. Many monopolistic firms have brought spurious lawsuits against competitors, charging patent infringement or other injury. These suits would often tie up the business of the competitors and involve them in heavy legal costs, even though the suits were eventually dismissed. Competitors have sometimes been intimidated by the mere threat of such suits. On the other hand, monopolistic firms have infringed upon the patent rights of competitors or appropriated trade secrets gained through espionage or bribery, confident that they would make more through these illegitimate acts than any amounts which the courts might award the competitors by way of damages. Customers of competitors have been bribed to cancel orders or to default on payments, and valued employees have been bribed to leave the employ of competitors.

Finally, monopolistic concerns have sought to damage their competitors' products or reputations. For instance, the National Cash Register Company is said to have "doctored" machines made by competitors so that they would break down or fail to work satisfactorily. The same company bought up competitors' machines from their users and offered them for resale, displaying them as "junk" or as "inferior products" at 30 cents on the dollar.

Monopolies and Business Cycles. Monopolies have also been charged with increasing the instability of our economic system. In periods of good business they maintain stable prices for their products in the face of increasing production and falling unit costs, and without increasing the wages of labor significantly. Such policies, in spite of all that can be done to support consumption through installment selling or other credit devices, lead eventually to business breakdown and depression. And in periods of depression, the monopolies are likely to hold their prices at the customary level, taking losses by selling fewer units at the stable price rather than by selling more at a lower price. This policy results in laying off labor, curtailing purchases of materials and supplies, and reducing consumer purchasing power, and eventually affects all industries and adds to the cumulative downward spiral of depression. Some economists hold that cyclical swings in business can never be eliminated, or even greatly reduced in severity, so long as many of our most important industries are controlled by monopolies with their rigid or "sticky" prices.

Monopolies and Economic Progress. Monopolies may also operate as a bar to economic progress. Virtually complete monopolies need not worry about developing new methods and processes or making new inventions, for their profits do not depend upon continuous progress in production. Indeed, they may even go to the other extreme and acquire control of new inventions by fair means or foul, only to put them on the shelf for a long time so that they will not overturn existing conditions in the industry. However, in certain industries which are dominated by a few large concerns, there has often been keen competition in the field of technological improvement; and the public has frequently benefited by this sort of competition.

Monopoly Control of the Whole Economy. It is sometimes asserted that the monopoly problem goes far beyond the question of monopoly control in particular industries—that our gigantic industrial and financial concerns not only control individual industries, but have extended their control to the economy of the United States as a whole, to the government of the country, and even to its public opinion. These conclusions are based on data dealing with the concentration of economic power in this country.

It is estimated that corporations now transact from 60 to 65 per cent of the total volume of business in the United States, and own almost 80 per cent of all business wealth. Moreover, the ownership of corporate wealth is concentrated in a relatively few large corporations. In 1937, 228,721 corporations with assets of less than \$50,000 each made up 55 per cent of all corporations, but owned only $1\frac{1}{2}$ per cent of total corporate assets. The 394 largest corporations owned about 45 per cent of all corporate assets, though they comprised less than one-tenth of one per cent of the total number of corporations.¹² There were some 30 "billion-dollar" corporations in the United States. The largest were the Metropolitan Life Insurance Company and the American Telephone and Telegraph Company, each of which had larger total assets than any of 38 of our states. The smallest of these 30 corporations was richer than any one of 18 of our states.¹³ The number of "billion-dollar" corporations increased to 43 during the period of World War II.

This concentration of business wealth in the hands of relatively few large corporations is general throughout the leading fields of industry and finance. In 1936, the 200 largest non-financial corporations had total assets of over \$75,000,000,000, or about one-fourth of the national wealth. The three largest industrials (Standard Oil Company of New Jersey, United States Steel Corporation, and General Motors Corporation) had total assets of \$5,209,200,000; the three largest public utilities (American Telephone

¹² Temporary National Economic Committee, *Final Statement of Senator Joseph C. O'Mahoney*, Washington, Government Printing Office, 1941, p. 7.

¹³ *Ibid.*, p. 5.

and Telegraph Company, Consolidated Edison Company of New York, Inc., and Commonwealth and Southern Corporation) had total assets of \$6,548,300,000; and the three largest railroads (Pennsylvania Railroad Company, New York Central Railroad Company, and Allegheny Corporation) had total assets of \$6,958,000,000.¹⁴ In 1933, the 50 largest financial corporations had total assets of some \$35,000,000,000. The three largest banks (Chase National Bank, National City Bank, and Guaranty Trust Company) had total assets of \$6,078,600,000, and the three largest insurance companies (Metropolitan Life Insurance Company, Prudential Insurance Company, and New York Life Insurance Company) had total assets of \$9,607,900,000.¹⁵

Income, Ownership, and Savings. The concentration of corporate income is similar to that of corporate wealth. In 1937, of 477,838 corporations which made income tax returns, 285,810 had no income. The corporations which had net incomes of less than \$5000 made up 65 per cent of all which reported incomes, but received less than 2 per cent of the total income of all these corporations. At the other extreme, 248 corporations received 40 per cent of the total net income of all corporations, though they made up only one-tenth of one per cent of the total number of corporations with incomes. It might be thought that this concentration of wealth and income is unimportant, because the ownership of these corporations is popularly supposed to be widespread. Actually, however, the ownership of corporations is highly concentrated, for it is estimated that one-half of all dividends paid in the United States are received by stockholders who comprise less than 1 per cent of all American corporate stockholders.¹⁶ Moreover, the situation is not improving. In 1937, the corporations with assets of \$1,000,000 or more made up only 5 per cent of a group of non-financial corporations studied, but they had 88 per cent of the savings of all these corporations. The corporations with assets of less than \$50,000 were 59 per cent of the total group but had no savings at all.¹⁷

Interlocking Interests of Large Corporations. The mere fact that economic power is largely concentrated in relatively few corporations does little to support a claim of monopoly control of the whole economy unless it can be shown that these large corporations work together as a group toward this end. This seems to be the case. In 1937 there were 3544 directorships on the boards of the 200 largest non-financial and the 50 largest financial corporations, and these directorships were held by 2725 individual directors. One director held 9 such posts among the 250 cor-

¹⁴ National Resources Committee, *The Structure of the American Economy*, Washington, Government Printing Office, 1939, pp. 274-276.

¹⁵ *Ibid.*, p. 298.

¹⁶ Temporary National Economic Committee, *Final Statement of Senator Joseph C. O'Mahoney*, p. 8.

¹⁷ *Ibid.*, p. 9.

porations, and there were 83 men who held 4 or more directorships. Of these, 59 were active in the affairs of at least one of the corporations which they served.¹⁸

The National Resources Committee found that companies controlling 62 per cent of the total assets of the 200 largest non-financial and 50 largest financial groups were members of 8 large "interest groups," which combined industrials, railroads, and public utilities with financial organizations in informal communities of interest. The so-called Morgan-First National interest group included 13 industrials, 12 public utilities, 5 major railroad systems, and 5 banks. These companies had total assets of over \$30,000,000,000. The Kuhn Loeb group included 5 major railroad systems, 2 other railroads, 1 utility, and 1 bank, with total assets of almost \$11,000,000,000. The smallest of the 8 interest groups was the Boston group, which comprised 4 industrials, 2 utilities, and 1 bank, with total assets of less than \$2,000,000,000.¹⁹ There was also said to be much overlapping and interconnection between these interest groups.

Controlling the Government. That the large business and financial interests of the country are organized into pressure groups, for the purpose of influencing and controlling our various governmental units, seems hardly open to question. According to a recent government study, these pressure groups include such organizations as the Chamber of Commerce of the United States, the National Association of Manufacturers, the Edison Electric Institute, the Association of Life Insurance Presidents, the Association of American Railroads, the American Bankers Association, the Investment Bankers Association of America, the American Iron and Steel Institute, the American Petroleum Institute, the National Lumber Manufacturers' Association, the National Coal Association, the Copper Institute, and such closely related groups as the American Bar Association and the American Newspaper Publishers Association.²⁰ There are, of course, other pressure organizations representing workers, farmers, and other groups, but in general the forces of business and finance are better organized and have far greater resources and staying power.

The methods used by pressure groups in attempting to influence the government include working for "favorable" candidates for legislative and other offices, and against other candidates; lobbying for the passage of desired legislation and to prevent the passage of unfavorable laws; opposing the administrative agencies charged with the duty of enforcing laws affecting business and finance; fighting unfavorable laws through the courts and advising members to disregard the laws until court decisions

¹⁸ Temporary National Economic Committee, *Progress Report of the Executive Secretary, January 15, 1941*, Washington, Government Printing Office, 1941, p. 11.

¹⁹ National Resources Committee, *The Structure of the American Economy*, pp. 306-317.

²⁰ Temporary National Economic Committee, Monograph No. 26, *Economic Power and Political Pressures*, Washington, Government Printing Office, 1941, pp. 14, 15.

have been reached; trying, in later elections, to bring about the election of legislators who will repeal or amend unfavorable laws; and working later for the repeal or amendment of these laws. The efforts of business and financial interests to influence the government are not always successful, but they are effective in many cases.

Control of the Press. A considerable measure of control over the newspapers of the country aids our business and financial groups in their efforts to dominate the American economy. Many pressure organizations which represent business and finance have large funds available for advertising, supply newspapers with "canned" articles and editorials, and in general try to keep on cordial terms with the publishers of important papers. The newspaper publishers frequently reciprocate. In the struggles between business and labor or business and government, the business side of the controversy is presented favorably by the press. Labor is commonly held responsible for industrial disputes and for any violence which results, while the government is represented as the prosecutor if not the persecutor of business. In addition to "editorializing" the news, some newspapers have suppressed or "toned down" news unfavorable to leading advertisers. On the basis of the picture presented in the last few pages, many people conclude that the problem of monopoly today goes far beyond that of price and production control in particular industries.

ATTEMPTED SOLUTIONS OF THE MONOPOLY PROBLEM

Checks on Monopoly Powers. Even in the absence of governmental interference, the effects of monopoly control are not always so bad as they are painted. A monopoly must exercise some care as to how high a price it charges, or it may cause customers to turn to substitutes or competition to develop in the form of new firms attracted by large profits. Monopolies may conceivably moderate their policies for fear of stirring up public opinion, or because of a sense of justice or fairness on the part of their management. Even more likely, the management of a monopoly may become stagnant or inert, and fail to take full advantage of its powers and opportunities. Finally, even if a monopoly is determined to exploit the public to the utmost, it may not be possible to determine the exact price which will bring in the greatest possible total net return.

However, the people of the United States, with their strong distrust of monopolies, have not been willing to depend upon the semi-automatic forces described above to restrain the monopolies in the use of their powers. Since the monopoly movement constitutes a problem which is national in character, we have demanded federal legislation dealing with its abuses. The basic law, the Sherman Anti-Trust Act, was passed in 1890, shortly

after the start of the monopoly movement but before the most active years of monopoly development.

The Sherman Anti-Trust Act. The Sherman Anti-Trust Act was a rather brief, though important, document. It declared illegal all contracts, combinations of business firms, and conspiracies, in restraint of interstate or foreign commerce. It made guilty of a misdemeanor every person who monopolized, attempted to monopolize, or combined or conspired with any other person or persons to monopolize, any part of the trade or commerce among the states or with foreign nations. It declared illegal all contracts, combinations, and conspiracies in restraint of trade in a territory of the United States, in the District of Columbia, or between either of these and any state, states, or foreign nations. The term "person" as used in the Act was defined as including corporations and associations.

Penalties for the violation of these provisions were set at a fine not exceeding five thousand dollars, or imprisonment not exceeding one year, or both. Persons suffering damages as the result of violations of the Act could sue the guilty parties in the federal courts and recover triple damages, plus costs. The circuit courts of the United States were given authority to prevent and restrain violations, by injunction or otherwise, upon petition of the district attorneys and after hearings had been held. These courts were empowered to summon witnesses from any part of the country. The property of any violator, intercepted in the course of interstate or foreign commerce, was declared forfeited to the United States.

Enforcement of the Sherman Act. At first glance it would seem that Congress, in passing the Sherman Act, had forged a powerful weapon for dealing with monopolies. However, the Sherman Act was quite ineffectual for many years, and the period of most active monopoly formation—1897 to 1903—occurred after its enactment. This early ineffectiveness of the Act was attributable to several causes, including uncertainty of the exact meaning of certain parts of the law, lack of funds with which to enforce it, the apathy and incompetence of the attorney-generals and their subordinates which led to poorly drawn indictments and inexpert pleading of cases, and the lack of public support. In 1895, an important case involving the sugar trust, *United States vs. E. C. Knight Company*, was decided in favor of the trust in such manner as to throw doubt upon the federal government's power to deal with monopolies. The Supreme Court held that the government had proved only the concentration of industrial control in the industry and not restraint of interstate or foreign commerce.

A few years later, two decisions favorable to the government put new life into the Sherman Act. In 1899, the Supreme Court unanimously upheld the decision of the Circuit Court of Appeals dissolving the pool between the Addyston Pipe and Steel Company and five other corporations, all engaged in the manufacture of cast-iron pipe, and enjoining the pool members perpetually from carrying out their agreement. In 1904, the

Northern Securities Company case decided definitely that the Sherman Act applied to holding companies, whenever these companies operated to restrain interstate or foreign commerce. The Northern Securities Company, by giving its own securities in exchange, had acquired almost complete control of the Northern Pacific and Great Northern Railroads, and would have operated to eliminate competition between these two roads. These two decisions encouraged the government to bring further suits, and discouraged the formation of additional monopoly organizations.

The Rule of Reason. In the cases involving the Standard Oil Company of New Jersey and the American Tobacco Company, both of which were decided in 1911, the Supreme Court developed the now famous "rule of reason" for deciding such cases. Although the Court had thrice decided that the Sherman Act applied to *all* contracts, combinations, and conspiracies in restraint of interstate or foreign commerce, it now held that the Act was meant to apply only to "unreasonable restraints" on such commerce.

The Court suggested that the Sherman Act had been worded so strictly because of the many new types of contracts and combinations which were being developed, and the desire of the framers to see to it that no monopoly escaped merely because of the form in which it was organized. The contracts, or other acts, prohibited in the law were not explicitly defined and the classes of acts prohibited were so broad that almost any activities of business men might come under the influence of the Act under certain conditions. Thus, it was held, the use of reason became indispensable in deciding whether particular business activities had or had not brought about the wrongs which the statute prohibited.

As Justice Brandeis put it in 1918, in the case of the Board of Trade of the City of Chicago, *et al., vs. the United States*: "Every agreement concerning trade, every regulation of trade restrains. To bind, to restrain, is of their very essence. The true test of legality is whether the restraint imposed is such as merely regulates and perhaps thereby promotes competition or whether it is such as may suppress or even destroy competition." In spite of the development of the rule of reason, the Supreme Court decided that both the Standard Oil Company and the American Tobacco Company were operating in violation of the Sherman Act, and they were ordered to dissolve within a reasonable period of time. Later on, however, under the interpretation of the rule of reason, a government case against the United States Steel Corporation was decided in favor of that company.

The Clayton Act. Because the Sherman Act was not wholly successful in carrying out the purposes of its framers and because there was need for further clarification of its provisions, two additional laws were passed by Congress in 1914. The first of these, the Clayton Act, with certain qualifications, prohibited local price discrimination and the use of tying contracts. Because of the popularity of the holding company device, the Act spe-

cifically provided that holding companies were illegal if their effect was to lessen competition substantially in any industry, to restrain commerce in any section or community, or to create a monopoly in any line of commerce. It was also provided that, after 1916, no person should be at the same time a director of two or more corporations engaged in commerce, other than banks and common carriers, any one of which had a capital, surplus, and undivided profits of more than \$1,000,000, if such corporations were, or had been, competitors, so that the elimination, by agreement, of competition between the firms would constitute a violation of the anti-trust laws.

Violations of the anti-trust laws by corporations were thereafter to be considered as violations by the directors or other officers who were responsible for the illegal activities, and these officials were to be subject to the penal provisions of the anti-trust laws. Labor organizations and certain types of agricultural associations were exempted from the provisions of the anti-trust laws. Responsibility for the enforcement of these laws was vested in the Federal Trade Commission for industrial combinations, the Federal Reserve Board for financial institutions, and the Interstate Commerce Commission for combinations in transportation. The Clayton Act constituted an addition to, rather than a change in, the anti-trust law as set up in the Sherman Act, for government suits against monopolies continued to be brought under the Sherman Act. The Clayton Act was also intended to be a preventive measure in connection with monopoly formation rather than, as in the case of the Sherman Act, a cure for monopolies after they had been formed.

The Federal Trade Commission Act. A commission of five members, appointed by the President, for the administrative regulation of business conduct was created by the Federal Trade Commission Act, which like the Clayton Act, was passed in 1914. The principal powers of the Federal Trade Commission were (1) the investigation, and (2) the prevention, of unfair competition.

In the field of investigation, the Commission was empowered to gather and compile information concerning the organization, business conduct, practices, and management of any corporation engaged in commerce, except banks and common carriers, and to require such corporations to make regular or special reports, or to answer specific questions. It could, upon request of the President or either house of Congress, investigate and report the facts concerning alleged violations of the anti-trust acts by any corporation. When requested by the Attorney-General, it could investigate and make recommendations for the readjustment of the business of any corporation alleged to be violating the anti-trust laws, and, when requested by the court, could ascertain and report an appropriate form of decree in any suit in equity under the anti-trust laws, and investigate the manner in which any final decree in an anti-trust case had been or was being

carried out. It could make public, from time to time, such portions of its information as it deemed expedient in the public interest.

With regard to conditions of competition, the Act declared that unfair methods of competition in commerce were unlawful, and the Commission was directed to prevent persons and firms from using such unfair methods. The Act did not specify what were or were not unfair methods of competition, so that the Commission was granted a wide territory within which to exercise its judgment. If the Commission had reason to believe that a person or firm was using unfair methods, it could serve a complaint, stating its charges and providing for a hearing. After the hearing, if the charges proved to be true, the Commission could order the person or firm to stop employing the objectionable methods. If the order was not obeyed, the Commission could apply to the circuit court of appeals of the district for the enforcement of the order. Once this point was reached, the court had full jurisdiction over the case and could affirm, modify, or set aside the order of the Commission. Appeals could be taken to the Supreme Court.

The Work of the Federal Trade Commission. In trying to prevent the formation of monopolies under the provisions of the Clayton Act, the Federal Trade Commission has fought such things as corporate combinations tending toward monopoly, agreements and understandings between competitors, resale price maintenance, price discrimination, and tying and exclusive dealing arrangements. In trying to maintain standards of fair competition under the Federal Trade Commission Act, the Commission has proceeded against misrepresentation of the nature, quality, origin, or value of products; sales methods embodying an element of chance or lottery; commercial bribery; and disparagement and miscellaneous interferences with competitors.

Misrepresentations of the nature of products involve selling rebuilt or renovated articles as new, or such acts as calling articles made wholly or partly of rayon by such names as silk, pongee, satin, or taffeta. In connection with the quality of products, the Commission has forbidden the representation of bath salts as a remedy for obesity, a certain hair dye as safe, non-toxic, or non-poisonous, and a bunion remedy as a permanent and effective cure.²¹ In passing on the origin of products, the Commission has proceeded against blenders of liquor who represented themselves as distillers, clothing producers who implied that they were weavers of cloth, and furniture dealers who pretended to be manufacturers. Misrepresenting the value of products involves attempts to convince the buyer that he is getting an unusually good bargain. In this connection, the Commission has attacked the offering of "free" goods which are not really free, advertising articles for sale at slashed prices when in reality usual prices are charged, and advertising a 6 per cent rate of interest in connection with

²¹ H. L. Purdy, M. L. Lindahl, and W. A. Carter, *Corporate Concentration and Public Policy*, New York, Prentice-Hall, Inc., 1942, p. 439.

installment sales when the actual effective rate of interest is about 12 per cent.

Sales methods involving lottery or chance are illustrated by one company's practice of selling small pieces of inferior penny candy and returning the penny to some fortunate purchasers inside the wrapper of an occasional piece of the good.²² In commercial bribery, a seller presents gifts to employees or agents of customers, without the knowledge of the customers, in an effort to secure sales. Finally, in connection with the disparagement of competitors' products, the Commission has proceeded against butter manufacturers who stated that oleomargarine is made from coconut oil which is foul and unfit for human consumption, a producer of aspirin who claimed that he had exclusive rights to the name and that his competitors' products were counterfeit, and a newspaper publisher who made false statements about the financial condition of competitors.²³

The Commission has not been very successful in its efforts to preserve competition and prevent monopoly, and monopoly cases have usually made up a rather small part of its total activities. Monopoly proceedings are costly, and the Commission has not had much money with which to conduct them. Moreover, the provisions of the Clayton Act which the Commission has been trying to enforce suffered from defective draftsmanship, and the courts have not been willing to interpret them in a way which would make them powerful instruments in the fight against monopoly.

On the other hand, the efforts of the Commission to prevent and eliminate unfair competitive practices have been much more successful. Its activities in this field have been many and vigorous, and its cases have fared rather well in the courts. The substantive law of trade practices is more satisfactory than the common law, for under the common law it is necessary for complaining parties to show that they have suffered special injury as a result of the practices in question. It is better to have a commission with a direct responsibility to take action against unethical practices than to depend upon court actions brought by private individuals, for such individuals, because of considerations of cost and the uncertainty of success, are often unwilling to bring cases into court. While the unfair practices proceeded against by the Commission have usually been those of competitors or monopolistic competitors rather than of monopolies, we should not assume that the Commission's activities have had no preventive influence in connection with monopolies. Since unfair competitive practices often gave monopolies their start or at least were of considerable aid during their formative period, it is probable that the organization of some monopolies has been prevented by the work of the Commission in this field. On the whole, the Commission's record in connection with unfair

²² *Ibid.*, p. 450.

²³ *Ibid.*, pp. 454, 455.

competitive practices has been creditable, even though the Commission has fallen further and further behind in its work, has suffered from inadequate appropriations, has continued to use cumbersome and time-consuming methods of procedure, and has been less blessed than some governmental commissions with high-quality and permanent personnel.

Minor Changes in the Anti-Trust Laws. During the period from 1914 to 1929, several minor changes were made in the application of the anti-trust laws. The Shipping Act of 1916 legalized agreements between steamship lines with regard to fixing rates, apportioning traffic, and other matters, subject to the approval of the Shipping Board. The Packers and Stockyards Act of 1921 classified packers, commission merchants, and stockyards for special regulation under the supervision of the Secretary of Agriculture. The Webb-Pomerene Act of 1918 legalized agreements and associations entered into for the sole purpose of engaging in export trade, or holding company arrangements for the same purpose, providing that restraint of trade within the United States did not result. The Capper-Volstead Act of 1922 legalized the organization of cooperative associations of agricultural producers, provided they operated for the mutual benefit of members, did not handle products of non-members to an amount greater in value than those handled for members, and either allowed no member more than one vote or paid no dividends on stock or membership capital in excess of 8 per cent a year.

The N.R.A. and the Anti-Trust Laws. As the post-1929 depression wore on, an increasing volume of opposition to anti-trust laws developed among business men. It was held that business instability was bound to prevail so long as business firms in an industry were not permitted to cooperate with respect to industrial capacity, output, and prices, without being subject to prosecution under the anti-trust laws. Moreover, it was claimed that unfair methods had not been eliminated and that, under the influence of the depression, they had become more intolerable than ever.

These complaints led to the passage, in 1933, of the National Industrial Recovery Act, which authorized trade associations or other organizations of business men to draw up "codes of fair competition" for their respective industries and submit them to the government authorities for approval. These codes, after being examined at hearings attended by representatives of labor and consumers, as well as government officials, were submitted to the President and, if approved by him, thereupon constituted the laws of business conduct for the respective industries. The codes affected all firms in an industry regardless of whether they had or had not been parties to their formation.

Not only were the codes expected to enforce fair practices in the industries, but it was understood, also, that business firms would not be prosecuted under the anti-trust laws for activities which were approved under the codes. In return for these concessions to business men, the latter were

required to make the codes acceptable to the government with respect to child labor, collective bargaining for employees, and maximum hours and minimum wages for their workers.

The general success, or lack of success, of the N.R.A. need not concern us here. For the present, it is sufficient to note that the codes of fair competition were rushed through and approved very hastily so that many contained provisions which encouraged the further development of monopoly conditions, under the suspension of the anti-trust laws. Of the first 677 codes, 560 contained some provision for controlling prices, directly or indirectly; 361 set up standard cost systems; 403 forbade sales below "cost"; 352 prohibited members from selling at prices below their individual costs; and 51 attempted to prevent sales at prices below some average costs of the whole industry. Ninety-one codes provided in some way for the restriction of output, by limiting the size of inventories, by forbidding increases in productive capacity without special permission, by limiting hours of operation, or by setting up fixed quotas of production or sale. Finally, some codes provided for sharing markets by prohibiting freight allowances (to keep sellers from selling in distant markets by absorbing freight), by forbidding firms to sell outside their regular market areas at prices lower than those charged at home, or by forbidding firms from selling in other zones at prices lower than those charged by firms in the other zones.²⁴ Since the code system practically compelled the producers in an industry to combine, it is not surprising that the N.R.A. gave a strong impetus to the growth of monopoly powers in many industries and interfered seriously with the traditional governmental policy toward monopolies.

The Robinson-Patman Amendment. Several other current laws have a bearing on the monopoly problem in the United States. One is the Robinson-Patman Amendment to the Clayton Act, passed in 1936. The prohibition of price discrimination by the Clayton Act was concerned chiefly with the effects of such discrimination upon the competitors of the offending company. But price discrimination may have important effects upon the different buyers and their customers, and the Robinson-Patman Amendment seeks to broaden and clarify the provisions of the Clayton Act on this point.

The amendment forbids sellers to charge different prices to different purchasers of commodities of like grade and quality—unless such price differences make only due allowance for differences in the cost of manufacture, sale, or delivery—whenever such discrimination would lessen competition substantially (1) between any buyer and the discriminating firm, (2) between the less favored and the more favored buyers, or (3) between the customers of those buyers. In the past, it was common for manufac-

²⁴ Temporary National Economic Committee, *Competition and Monopoly in American Industry*, pp. 260-265.

turers to market part of their products at regular prices, and to sell the remainder to mail-order houses, chain stores, or department stores at low prices for sale under a different name; or to discriminate for or against these types of marketing agencies, as compared with ordinary wholesalers, jobbers, and retailers. Any such discriminations, unless they can be justified on the basis of cost, are forbidden under the Robinson-Patman Amendment.

Moreover, the amendment authorizes the Federal Trade Commission to fix and establish certain quantity limits beyond which price differences may be prohibited, even though these differences are justified on the basis of differences in the cost of manufacture, sale, or delivery. It is clear that such provisions tend to handicap distributors who have formerly purchased in large quantities and sold at low prices. The amendment itself applies only to sellers in interstate commerce, but it has been reinforced by 32 state laws with similar provisions.

The Miller-Tydings Act. The Sherman Act of 1890 was amended by the Miller-Tydings Act of 1937, so as to legalize contracts for the maintenance of resale prices of branded articles wherever such contracts are approved by state laws, as they are in all but four states. Price-cutting on branded articles, and especially their use as "loss-leaders" by chain and department stores, had long been a source of annoyance, both to manufacturers of the goods, who tried by extensive advertising to build up good will for their goods at regular retail prices, and to competing independent merchants, who naturally found their own trade injured by such price-cutting. Under the Miller-Tydings Act, the prices of branded goods may be controlled by the manufacturer all the way down the line until they finally reach the ultimate consumer.

The effect of the Act is virtually to eliminate price competition among the various sellers of a branded commodity. While the Act states specifically that it does not intend to legalize price-fixing as between the various manufacturers of competing brands or articles, it may develop that the power to fix resale prices of their own goods will increase, rather than diminish, the tendency of "monopolistic competitors" to cooperate with respect to price policy. Hence, the ultimate effect of the Act may be to promote the development of trust conditions in industry.

In addition to the "fair trade laws," which are the state counterparts of the Miller-Tydings Act, 27 states have "unfair practices acts." In general, these measures prohibit wholesalers and retailers from selling goods at prices lower than invoice or replacement cost, whichever is lower, plus a minimum mark-up. The amount of the mark-up is determined in various ways under the different laws, but is supposed to bear some relationship to the seller's cost of doing business.

Recent Enforcement of the Anti-Trust Laws. For several years after the ill-fated experiment with the N.R.A., there was a fairly continuous attempt

to enforce anti-trust legislation. Many court decisions were handed down against firms participating in price-fixing agreements, scores of cases involving the illegal activities of trade associations were fought successfully by the government, and there were several cases involving basing-point systems and patent pools. Among the well-known cases were those brought against the Aluminum Company of America; the Bausch and Lomb Optical Company; the International Business Machines Corporation and Remington-Rand, Inc.; the American Medical Association; the Great Atlantic and Pacific Tea Company; three leading drug manufacturers; the American Surgical Trade Association and 24 member firms; the American Society of Composers, Authors, and Publishers; four manufacturers of computing gasoline pumps; the three leading companies producing automobiles (in connection with installment financing); and five important producers of motion picture films.

Considerations of space make it impossible to analyze these and other individual cases in detail. In some cases the government was unsuccessful in its anti-trust prosecutions, but it fought many more to a favorable conclusion in the courts. In the year ending June 30, 1941, for example, the Anti-Trust Division of the United States Department of Justice won 58 cases and lost 6 under the Sherman Act, instituted 88 new cases, and brought 2797 new defendants into court. In the same year, it won 228 cases and lost 6 under other anti-trust laws, instituted 249 new cases, and brought 623 new defendants into court.²⁵

The period of World War II, however, was another story. Under wartime legislation, certificates carrying immunity from the anti-trust laws could be issued by the Department of Justice whenever the Chairman of the War Production Board, after consultation with the Attorney General, found such action desirable from the point of view of war production and the successful prosecution of the war. Hundreds of these certificates were issued during the war period. The Attorney General also cleared with the War Production Board certain cases in which joint activities within an industry were necessary for war production. The Department of Justice was authorized to postpone certain investigations and trials, involving alleged infringement of the anti-trust laws, where such action seemed necessary in the interest of the war effort; and a number of cases were thus postponed.

A comparatively small number of large companies accounted for the great bulk of the United States' huge volume of production for war purposes. In most fields the large companies emerged from the war much more powerful than before, and in some industries small companies were almost completely eliminated. Finally, anti-trust prosecutions were far less common during the war period than they had been in previous years. In 1944,

²⁵ *Annual Report of the Attorney-General of the United States, 1941*, Washington, Government Printing Office, 1942, p. 64.

for example, the Department of Justice won 32 cases and lost 6 under the anti-trust laws, and instituted 22 new cases involving 574 defendants.²⁶ On the whole, then, the events of the war period were unfavorable from the point of view of the government's traditional anti-trust policy.

A Final Estimate of the Anti-Trust Laws. In spite of whatever accomplishments may be credited to the anti-trust laws of the United States, we must conclude, in general, that the federal government's campaign against monopolies has not been outstandingly successful. The criminal penalties of the Sherman Act and other laws have amounted to very little. It has been extremely difficult to send men to jail for monopoly activities, and the financial penalties have been too small to be effective. The granting of triple damages to those who have suffered from monopoly activities has never constituted a serious embarrassment to the monopolies. The funds at the disposal of enforcement agencies have often been inadequate. When a large company can spend more money on a single case than governmental agencies have to spend for a whole year's enforcement activities, the prospects for the enforcement of anti-trust legislation are not bright. Business men and their lawyers are often several jumps ahead of the government, and devise new methods of doing what they want to do as the government succeeds in discrediting and eliminating their former practices. Some monopolies have been able to avoid prosecution altogether, while others have been brought into court only to escape all penalties for their activities.

When the government has prosecuted anti-trust cases successfully, and the courts have ordered the dissolution of the monopolies, these dissolutions have rarely, if ever, restored truly competitive conditions. For example, the Standard Oil Company of New Jersey, a holding company which controlled a large part of the petroleum refining business, was ordered dissolved in 1911. The dissolution, however, consisted of giving the stockholders of the holding company their proportionate shares of the stock of the underlying companies, so that these companies continued to be controlled by the same people as before. As a result, there has been some doubt as to the degree to which the successor companies have competed with each other since the dissolution. It may be argued, of course, that the dissolution prevented the trust from maintaining or further perfecting its control over the oil business as time went on, and that new companies have arisen to compete with the successor companies, even if they have not competed with one another. However, in view of the absence of price competition among the major companies in the industry at present, it must be held that the dissolution was a failure in many respects. Other examples of unsuccessful attempts to dissolve monopolies might readily be cited.

The Federal Trade Commission Act and the Clayton Act were somewhat more successful than the Sherman Act, because they represented a partial change in policy. That is to say, they followed the policy of legislative

²⁶ *Ibid.*, 1944, p. 20.

regulation and administrative supervision of competition, rather than the traditional policy of "trust-busting" and enforced competition. In recent years, however, monopolies have become more difficult to control, since many of them arise out of the activities of trade associations or result from the secret and informal cooperation of large firms between which there are no actual agreements or combinations. Finally, none of our anti-trust laws are applicable directly to the larger problem of monopoly controls *between* rather than within industries or to the domination of the economy by large business and financial units.

OUR FUTURE MONOPOLY POLICY

The problem of monopolies is very important, not only in its own right but in relation to other problems of economic instability, agriculture, labor, and international trade. Despite all the hullabaloo about monopolies and trust-busting, our federal government has never established and carried out a really comprehensive program against monopolies, and this fact may account for its singular lack of success in this field. The elements of a comprehensive anti-monopoly program were effectively set forth in a recent study,²⁷ and this program might well be made the official program. It has several phases.

General Measures. In the first place, efforts directed toward the maintenance of a high and stable level of production, employment, and income in the economy as a whole would be helpful in solving the monopoly problem. Fear of depression is partly responsible for the monopolistic practices of labor unions and the monopolistic price policies of industry, and depressions allow some firms to gobble up their competitors. Governmental policies to prevent demoralization of the market in areas where chronic surpluses exist, and to facilitate the transfer of resources from these fields to others, would also be helpful, for such areas furnish fertile fields for the development of monopolies. Again, the government might furnish assistance to new firms which would give direct competition to established monopolies. This could be accomplished through such devices as reforms of the patent laws, changes in taxation to favor young and growing firms, and the refusal to sell government war plants to large established firms.

Governmental Research and Economic Education. Anti-monopoly policies may be ineffective in the case of some industries because not enough is known about industry and market structures. In such cases, governmental research may provide the basis for more satisfactory policies. Governmental research in connection with products and productive processes might be used to make available to small firms, cheaply or without charge, a great amount of knowledge which large firms derive readily from

²⁷ Howard S. Ellis, in *Financing American Prosperity*, New York, Twentieth Century Fund, 1945, pp. 189-196.

their laboratories of experimentation and research, but which at present is not available to small firms. Again, consumer education, grade labeling, and the requirement of accurate and simple information concerning the physical attributes of products would help to eliminate the wastes involved in deliberate and unnecessary differentiation of products and resultant restrictionism.

Removal of Governmental or Legal Supports for Monopoly. Steps should be taken to eliminate governmental policies and legal conditions that are favorable to monopolies. Tariff protection for monopolistic industries should be sharply reduced. Taxation should be reformed, as we have indicated in other connections, to encourage the founding of new enterprises and make possible the development and growth of new small enterprises. Obstacles to interstate trade should be broken down, and federal and state laws legalizing resale price maintenance should be eliminated. Finally, our patent laws should be reformed. Firms with patents should be compelled to license them to other firms which desire to use them, firms with patents should be prevented from controlling the businesses of other firms which are allowed to use the patents, the period for which patent rights are granted should be shortened, and firms should be deprived of patents for violating the patent laws.

Strengthened Enforcement of the Anti-Trust Laws. A comprehensive anti-monopoly program must include vigorous enforcement of the anti-trust laws. The Federal Trade Commission and the Anti-Trust Division of the Department of Justice should be furnished adequate funds and high-grade personnel, and should be made to collaborate more effectively than in the past. Active and persistent investigation and prosecution of individuals and firms following monopolistic practices should be waged. Congress, or the Federal Trade Commission upon receipt of a delegation of authority from Congress, should codify the law with respect to unfair competitive practices, on the basis of past experience, in order to facilitate procedure. Federal charters for corporations might well be required, in order to enforce compliance with national standards of business conduct. Penalties under the anti-trust laws should be increased and applied rigorously to responsible officers and directors as well as to corporations themselves.

Governmental Regulation, Ownership, and Operation. When it is apparent that the monopoly form of organization is more efficient than other forms in a particular industry, direct governmental regulation, or ownership and operation, should be introduced. Regulation might be accomplished by giving to the Federal Trade Commission powers similar to those exercised by the Interstate Commerce Commission in its regulation of transportation. That is, the Commission would control the issuance of securities by monopolies, would have jurisdiction over extensions or restrictions of service or output by the monopolies, and would have the

power, if necessary, to control the prices charged by monopolies for their products, and the wages paid to and hours of work required of their workers, in order to prevent the exploitation of either consumers or employees.

We should not suppose that there are no objections to such a plan for direct regulation of monopolies. There is some doubt that it would be constitutional for the federal government to assume so extensive a control over monopolistic industries, under its power to regulate interstate commerce. The control of prices and wages in particular industries by government or commission is very difficult to administer, and is likely to spread to fields which were not considered in the original plan of control. The Commission would doubtless run into the thorny problems of fair valuation of properties and fair rate of return, which have been encountered in other fields of regulation. And there might be some question whether the final result would be control over monopolies by the Commission or control over the Commission by monopolies. Nevertheless, an attempt to regulate monopolies by commission might be far preferable to leaving them to operate in more or less unhampered fashion. Finally, if the regulation of monopolies is deemed unfeasible or proves ineffective, we may find it necessary to introduce direct governmental ownership and operation of certain industries which apparently belong in the monopolistic form on the basis of efficiency and cost.

If an industry is already organized in the monopoly form and is thought to be exploiting the consumers pretty thoroughly, but if it is not certain that the monopoly form of organization is justifiable on the basis of efficiency and cost, then the government might set up and operate "yardstick plants" in the same industry. If these plants could be established with facilities transferred from other fields of production in which chronic surpluses existed, so much the better. The yardstick plants would produce the same products as the monopolized industries and would sell them, as nearly as possible, on the basis of cost of production. In this way, it would be hoped, the prices charged by the erstwhile monopolies would be beaten down, the exploitation of consumers would be stopped, and private enterprises might even be induced to enter the same fields.

Conclusion. Apparently, then, an effective attack on the monopoly problem involves a comprehensive set of measures, and we may wonder whether any federal administration would ever find it politically feasible to adopt such a far-reaching group of policies. Indeed, having seen what it would involve, we may well wonder whether we want an effective attack to be made on the monopoly problem. If we do, the means are available and it is not too late to start. The result of the program, we hope, would be both relief from the monopoly problem and the continued operation of our economic system on the basis of capitalistic institutions and price relationships.

1. Distinguish between business combinations and monopolies. What is the significance of this distinction? Explain.
2. Explain the principal characteristics of the pool and the trust as types of monopoly organization.
3. How important were monopoly organizations in the United States as of 1904?
4. What are some examples of complete or almost complete monopoly control in American industry at the present time?
5. "The dominant concerns in many American industries are either holding companies or mergers." Explain.
6. Show how monopoly conditions may exist in an industry even though there is no one firm or formal combination of firms which controls all or almost all of the industry's productive capacity.
7. What is the importance of price leadership, basing-point systems, patent pools, and market-sharing in connection with modern monopolies? Explain.
8. "The operation of trade associations may or may not result in monopoly conditions." Explain.
9. When monopolies are highly successful, is the reason usually found in the fact that they are able to achieve greater efficiency in production than other business units? Explain.
10. What have been the usual effects of monopoly control on the prices of the products sold by the industries in question?
11. How have monopolies employed unfair competitive tactics in acquiring and maintaining control over certain industries? Explain.
12. On what grounds may monopolies be charged with contributing to business instability?
13. Indicate the extent to which corporate wealth, income, security ownership, and savings are concentrated in the United States today.
14. Is there any evidence that large industrial and financial concerns cooperate for purposes of economic control? Explain.
15. Why is it sometimes charged that large industrial and financial concerns attempt to control the government and the press?
16. How did the Sherman Act of 1890 attempt to deal with the monopoly problem, and with what success? Explain.
17. Explain the meaning of the "rule of reason" and its importance in connection with the enforcement of the Sherman Act.
18. What were the principal provisions of the Clayton Act of 1914? How was this Act related to the Sherman Act?
19. Describe the chief powers given to the Federal Trade Commission by legislation passed in 1914. Has the Commission been able to exercise these powers effectively? Explain.
20. What was the status of the anti-trust laws under the N.R.A.?
21. What was the effect of the N.R.A. on the monopoly problem in the United States? Why?
22. Show how laws, such as the Robinson-Patman and Miller-Tydings Acts, have had a bearing on the monopoly problem in recent years.
23. Comment on the enforcement of the anti-trust laws in recent years.
24. Has the government's program for dealing with the monopoly problem been successful, on the whole, up to the present time? Explain.

25. What should be our future policy with regard to monopoly? Explain.
26. Indicate some of the measures which should be included in a really comprehensive anti-monopoly program.
27. "One important thing which the government should do in connection with an anti-monopoly program is to stop supporting monopolies through policies of its own." Explain.
28. How could the enforcement of the anti-trust laws be strengthened?
29. Indicate some of the problems involved in the direct regulation of monopolies through a commission.

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Socialism and Communism

SOME PEOPLE FEEL THAT IT IS USELESS TO ATTEMPT, AS WE HAVE DONE, TO deal with economic maladjustments, such as the problems of banking, agriculture, and transportation, as separate and distinct matters susceptible of solution without reference to other problems. To these people it appears that such problems are merely symptoms which indicate that our competitive, capitalistic economic system is already, or is rapidly becoming, unworkable. If this is true, the attempt to treat these symptoms individually is doomed to failure. Those who hold this view, whom we call collectivists, believe that our traditional economic system should be abandoned and some type of planned economy substituted for it. In the present chapter we shall examine in some detail the principles, and the outstanding points of strength and weakness, of two of the principal types of collectivism.

COLLECTIVISM IN GENERAL

The Characteristics of Collectivism. Before considering socialism and communism as specific types of collectivism, we may list the characteristics which seem to be common to all types of collectivism. They are, according to one writer: "First, a condemnation of the existing political and social order as unjust; second, an advocacy of a new order consistent with moral values; third, a belief that this ideal is realizable; fourth, a conviction that the immorality of the established order is traceable not to a fixed world order or to the unchanging nature of man but to corrupt institutions; fifth, a program of action leading to the ideal through a fundamental remolding of human nature, or of institutions, or both; and sixth, a revolutionary will to carry out this program."¹

The Condemnation of Capitalism—Distribution. In their indictment of our present economic system, the supporters of collectivism achieve a high degree of accord. To them, one of the most objectionable features of the present system is the existing inequality in the distribution of wealth and income. We have commented, in earlier chapters, upon the evils which result from economic inequality. It leads to the misdirection of production

¹ Oscar Jaszi, in *Encyclopædia of the Social Sciences*, New York, The Macmillan Company, 1935, vol. xiv, p. 188.

by consumers, and prevents the maximization of want-satisfaction from the goods which our system produces. It leads to inequality before the law, and inequality in influencing legislation and in political activities generally. It may also be an important factor contributing to business depressions. The collectivists are quite dismayed by the misery, suffering, vice, and crime which exist in the low-income groups, and by the luxury, waste, and extravagance indulged in by those with huge incomes. They object not merely to the extent and effects of inequality, but also to the way in which the inequality in income distribution comes about. They bemoan the fact that most people under our economic system must work long and hard for a miserable pittance, while a comparatively few favored individuals, through their ownership of land and capital, enjoy handsome incomes, often without lifting a hand in work of any kind. They condemn private property in land and capital, and believe that incomes should be paid solely on the basis of personal services rendered in production.

The Ineffectiveness of Production. Quite apart from their attacks upon present-day distribution, the collectivists have much to say about the wastefulness and ineffectiveness of capitalistic production. It is charged that there is much waste through competitive duplication of productive facilities and human labor. Collectivists delight in describing, as examples of this waste, competing gasoline service stations which often occupy three, and sometimes all four corners of busy intersections, although they sell products which are highly similar; and the half-dozen milk wagons of different companies which patrol a given city street, each serving a few consumers with dairy products which are substantially the same. Considerable waste of human and material resources also results from competitive advertising and salesmanship, which often lead merely to the transfer of customers from one competing company to another without serving any genuinely useful social purpose. Operating under the influence of self-interest and freedom of enterprise, business men, in selecting a line of production, are much more likely to consider the possibility of profits for themselves than the welfare of society. Hence, as the collectivists point out, productive resources are wasted in turning out trivial, useless, or even harmful products, while important human wants are left unsatisfied.

The Breakdowns of Capitalism. Not only is the capitalistic economic system said to be wasteful and inefficient when it operates, but it is subject to periodic breakdowns, commonly called depressions, with economic activity at low ebb, though human wants are far from being satisfied. Although some of the conditions leading to depressions might be corrected without destroying the system, the collectivists feel that these depressions can never be completely eliminated under capitalism, for they hold that depressions are inherent in the very nature of a capitalistic system. Economic activity under capitalism is said to be chaotic and planless. The individual is left relatively free to produce what he chooses, when he

chooses, and as much as he chooses, without reference to what other producers are doing or the public need for the product. With hundreds or thousands of producers operating in this fashion in an industry, there is little chance that exactly the proper amount of a good will be turned out year after year, or that the output of one industry will be properly adjusted to that of others. Periodic maladjustments and breakdowns appear to be unavoidable in such a system.

Moreover, the collectivists commonly hold that in a capitalistic system there is bound to be conflict between individual and social interests. It is to the interest of society to have every economic good produced in abundance until consumers' desires for the good are completely satisfied; but it is often to the interest of producers to restrict production, raise prices, and even to gain monopoly control for the purpose of increasing profits. Profit for society can result only from abundance, but profit for given producers comes often from scarcity and high prices; for if a producer can make his product relatively scarce, he can often command more of other products in exchange than he could secure by maximizing his own output. Thus, in a capitalistic system, the interests of society may suffer.

This conflict between individual and social interests manifests itself especially clearly after a long period of prosperity, marked by increasing production and rising prices. As the period of prosperity continues, some enterprisers appreciate the fact that it will be impossible to keep on producing increasingly larger quantities of goods and selling them at steadily rising prices. Hence, they begin to retrench in anticipation of a period of poor business. They lay off some workers, or put them on part time, and cut down their purchases of materials and supplies. Thus they reduce the purchasing power of laborers, farmers, and others, and the business of enterprisers in general falls off. They, in turn, react by further restriction of production and discharge of workers, and finally the business depression arrives in earnest. It should be noted that it is not to society's interest to have production restricted at such times. Consumers' wants for various kinds of economic goods have not declined. Society as a whole wants and needs to have production continued, or even increased, but private enterprisers, owning land and capital and faced with the actual or prospective disappearance of their profits, follow their own self-interest and retrench. In trying to protect their own interests, enterprisers may in this way do society a very ill turn. The collectivists contend that if society owned the land and capital and if business men worked for society for wages instead of profit, the situation would be vastly improved.

The Doctrines of Karl Marx. A considerable difference of opinion has existed among collectivists as to when and how collectivism will arrive. In some quarters, collectivism is regarded as an ideal future state, to be attained only through extensive preparation and hard work. On the

other hand, collectivism was regarded by Karl Marx and his followers as a system which will inevitably evolve out of capitalism, and which is already on the way whether most people realize it or not. The doctrines of Marx have had such a profound influence upon the advocates of collectivism that we must examine them briefly.

The Economic Interpretation of History and the Class Struggle. Karl Marx held that economic matters are dominant in determining the course of history and that the form of government, family system, moral standards, and literature of a society are but reflections or by-products of economic activities and institutions. An important feature of capitalism, according to Marx, is the continuous class struggle. The two opposing classes are called by different names at different times in history, he said, but the struggle goes on all the time. The class struggle at present is supposed to be between the capitalist (or owning) class and the proletariat (or working) class.

Value and Surplus Value. Prominent among Marx's theories were those relating to value and what he termed "surplus value." He held that all commodities, regardless of differences in size, shape, composition, and usefulness, contain a certain common element; that is, the labor used in producing them. Capital, though useful in production, he regarded merely as past labor congealed in a more or less permanent form. The values of commodities in terms of each other depend upon the amount of socially necessary labor contained in them. For example, a commodity that takes twice as much socially necessary labor to produce as another commodity has twice as much exchange value.

From this theory of value, Marx derived his explanation of the method by which workers are exploited by capitalists. Under capitalism, the workers cannot work for themselves because they are unable to acquire the land and capital needed in production. Consequently, they must work for the capitalists who own these material means of production. As a condition of employment, the workers must turn their products over to the capitalists who are free to sell them for whatever they will bring, which will be an amount proportionate to the labor contained in the products. On the other hand, the wages which the capitalists pay to the workers need only be high enough to maintain the laborers and their families, and to permit them to raise enough children to take their places. The difference between the value created by the workers in production and the wages paid to them is called "surplus value," and goes to the capitalists as an unearned increment. The workers cannot refuse to make this bad bargain, because they are dependent upon the capitalists for a chance to work and because in a capitalistic system there is always a reserve of unused laborers waiting to take the places of those already employed. In this exploitation of the workers and appropriation of surplus value by the capitalists lies the cause of the class struggle.

The Concentration of Capital and Expropriation of the Capitalists. According to Marx, the thirst of the capitalists for gain is so great that they seize every possible opportunity to increase the amount of the surplus value. This leads to increasing misery and suffering among the workers and to the formation of an ever larger labor reserve. Moreover, it brings about an increasing concentration of capital in the hands of a few individuals; for the large enterprisers are more efficient than the small ones, and force the latter out of business, taking over their land and capital. As this process goes on, society will become more and more the victim of commercial crises or depressions until finally will come that last crisis in which the proletariat will rise up, dethrone the capitalists, and operate the material means of production in their own interests. Eventually will come a classless order in which all workers will share the income of society and the state will dwindle away—for Marx regarded the bourgeois state as an instrument for protecting the owning class in its favored position.

Criticism of the Marxian Theories. Marx wrote three large volumes to elucidate and elaborate his theories, and many books of criticism of his theories have appeared since his time. However, we shall be able here merely to suggest why his theories have been very largely discredited. First of all, the idea that all of man's activities can be explained in terms of his economic activities and institutions is based upon an overemphasis of the economic aspects of life. History must certainly take economic matters into account, but there are many human actions which cannot be explained wholly on economic grounds. As for the class struggle, it is obvious that there are differences between capital and labor and that their relations might be loosely termed a struggle. However, this struggle is not the only, or necessarily the most important, feature of the capitalistic system. Marx, thinking of the proletariat as an ideal theoretical class, attributed to the workers a unity of purpose and action which they do not possess. Workers have varied interests, many of which are not economic in character. Moreover, there is little reason to suppose that workers always act in accordance with their economic interests, to the exclusion of interests of other kinds. It must also be remembered that there are economic differences between different classes of labor, and these differences *in degree* may sometimes be quite as important as the difference *in kind* that exists between capitalists and laborers.

The Marxian theory of value has also been sharply and successfully attacked. According to Marx, the only element common to things which have exchange value is the labor contained in them. This contention led him to say that articles of wealth which have not been produced by human labor have *use value*, but not *exchange value*. However, as we know, natural resources which are in no sense the product of human labor have exchange value just as truly as have the economic goods produced by

human labor. Marx never demonstrated that the value of a commodity depends upon the amount of labor contained in it. He merely attempted to show that there could be no other element common to different commodities—and this is by no means the same thing. Marx also overlooked the element of utility in connection with exchange value. His analysis of value was incomplete in that it approached the question of value entirely from the side of supply. For it should be clear that utility is an element common to all goods which have exchange value, and an element which plays an important rôle in the actual pricing of commodities in our economic system.

The theory of surplus value, also, has fared badly since Marx's time. In explaining surplus value, Marx divided capital into two parts. He said that constant capital (which we would today call fixed capital) consists of such things as machinery and buildings, and is not a source of gain to the capitalist, since this capital merely reproduces itself in the value of the things produced. He regarded variable capital, used to pay wages, as the source of the surplus value and the gain of the capitalists. But if, as Marx thought, all gain to the capitalists comes from variable capital and not from constant capital, it is difficult to understand why capitalists should introduce machinery into their industries or make use of increasing amounts of fixed capital. For the greater the quantity of fixed capital goods used, the less would be the gains in the form of further surplus value. The rate of gain to capitalists would be highest in industries using much labor and little fixed capital, and lowest in industries using little labor and much capital; and yet Marx's prediction of revolution was based upon the growth of a great army of unemployed labor, which supposedly was to result from an increasing use of labor-saving machinery.

In describing the return received by the capitalists as a surplus value filched from the laborers, Marx overlooked the element of time and the important function of waiting performed by those who save and thus make possible the formation of capital. He also largely disregarded the important administrative and managerial functions which are often performed by capitalists. Finally, he failed to explain why the capitalists, under competition—since they were making a large gain from each worker used—did not bid against one another in the attempt to hire more of these profitable laborers until they reached the point at which the contribution of the marginal worker to production equaled, and only just equaled, the wages which had to be paid to get his services.

It would seem that Marx was not an especially good prophet, if we may judge by subsequent events. The population has not become divided into two distinct classes, bourgeoisie and proletariat. Instead, a large middle class has continued to exist, and there are surveys which show that most individuals, whether relatively well-to-do or poor, consider themselves

members of the middle class. Under the development of the corporation and industrial combinations, there has been a considerable concentration of capital, but the concentration of *control* over capital has been more pronounced than that concentration of *ownership* which was so prominent in the Marxian analysis.

The lot of the workers has not been one of increasing degradation, misery, and squalor, in an absolute sense, since Marx's time. It is true, of course, that for some years following the Industrial Revolution the trend in the condition of the working class seemed to be in that direction; but labor organization and governmental intervention in the form of labor legislation and social insurance—measures in which Marx had no faith—have helped to reverse this trend. However, it is possible to argue that workers have become relatively worse off, and that the disparity between rich and poor has increased since Marx's time. For some years we have had a reserve of idle labor and this reserve has been large in times of severe depression, but it has hardly reached the proportions predicted by Marx.

Business depressions have probably increased in severity, in the absolute sense, as our economic system has become more extensive and more complex, but it is not clear that they have become relatively more severe. Finally, the time when all material means of production will be owned by a few, and the militant masses of the population (the proletariat) will rise up in their might and destroy these few capitalists, does not indeed appear to be imminent.²

THE ELEMENTS OF SOCIALISM AND COMMUNISM

Having described briefly the indictment which collectivists bring against the capitalistic system and their basis for hoping that it will be replaced by a different type of economic order, we now turn to a consideration of the characteristic features of socialism and communism. The terms "socialism" and "socialistic," like the word "inflation," are very loosely used in everyday conversation. Some people regard as socialistic every extension of governmental functions, even though the new functions are calculated to uphold and strengthen the existing order and thus lessen the probability of the adoption of a different type of system. Some, indeed, are inclined to view as socialistic any governmental activity, old or new, which apparently does not serve their own particular interests, and to stamp as a socialist any person whose views on economic matters differ from their own. The term socialism, to us, means an economic system in which the

² For a brief but searching analysis and criticism of the doctrines of Karl Marx, the student may well read Alexander Gray, *The Development of Economic Doctrine*, New York, Longmans, Green & Company, 1931, pp. 293-329. This work has been helpful in the preparation of this brief summary of the theories of Marx.

material (that is, non-human) means of production are owned and managed by society. Communism includes all of this and a good deal more. For under communism consumers' goods would be collectively owned and arbitrarily distributed among the populace, in addition to land and capital being owned and operated collectively.

The Collective Ownership of Land and Capital. Under both socialism and communism, then, the material means of production—that is, land and capital—would in general be owned by society and not by private individuals. But this does not necessarily mean that *all* land and capital would be owned by society. Individuals might be allowed to own plots of land as home sites, and even to own the land and capital needed in the operation of small business enterprises, such as shoe-repair shops and corner stores. Some socialists question that it would be wise for society to try to own and operate the land and capital used in agriculture, which is so largely a decentralized industry. Individuals would certainly be allowed to own such goods as lawn mowers and washing machines with which to perform services for themselves; and it would be exceedingly difficult to prevent people from performing similar services for others for pay, or from hiring these goods to others on a rental basis. An insistence on the complete and absolute ownership of land and capital by society would probably weaken, rather than strengthen, the socialist position. However, the essential fact remains that, under socialism, the land and capital used in all major industries, with the possible exception of agriculture, would be owned by society, and private individuals would no longer receive rent and interest for the use of these productive agents.

Opinions differ as to the method by which land and capital would be brought under the ownership of society. It is sometimes suggested that the present owners should be expropriated by violence and revolution. In general, it is probable that communists incline more strongly toward this point of view than do socialists. Many people realize, however, that such measures, while they might bring quick and thorough results, are subject to grave dangers. They are likely to repel all who are motivated by humanitarianism. Moreover, to cut down ruthlessly the present owners of land and capital would deprive society of some of its most capable executives and administrators. And if revolution were attempted but failed, society might well swing to the opposite extreme so that collectivism would be impossible for many years to come; but a failure to achieve collectivism by democratic processes at any one time might be followed by success a little later. Finally, if revolution resulted in a stoppage or breakdown of economic activities for any considerable period of time, an indescribable amount of suffering and loss of life would almost certainly result.

For these and other reasons, it seems that socialism, if it is to come, should await the time when a sufficient number of citizens appreciate its

merits so that it can be voted into existence. But, in any event, if the land and capital are to be acquired by society, there will remain the question of whether confiscation or purchase is the better method of procedure. In general, purchase appears to be sounder than confiscation. Of course, the compensation of present owners would perpetuate, for a time, the great inequalities in wealth and income to which socialists object so strenuously. However, since the lump sums or annuities which might be granted to the present owners would not be transferable to their heirs, this problem would be a temporary one.

The Collective Management of Land and Capital. Opinions differ, also, as to the best way to manage the socially owned industries. Some collectivists think that the central government should assume direct responsibility for the management and operation of all of the socialized industries. Others hold that management should be vested in trade unions, syndicates, or even in modern replicas of the medieval guilds. In any case, the central government would have to supervise in general the operation of the entire economic system, for there are some functions which could hardly be performed by any agency other than the central government.

Such duties would probably be performed by a governmental commission, or commissions. It would be necessary for the central agency to collect and study a great mass of statistical information relating to natural resources and other factors of production, to the wants of consumers for different kinds of economic goods, and to the extent to which these wants are currently being satisfied. This agency would have to make decisions, based upon the expressed will of the people, as to which industries should continue to operate and which, if any, should pass out of existence. It would have to decide how much of each industry's product should be made in each period, and coordinate the production of the different industries of the country so that the national income as a whole would meet the needs of this socialized people.

The Distribution of Income. An important problem under socialism or communism, as under capitalism, would be the distribution of the national income. Should economic goods be distributed directly among the citizens or should the members of society be given money incomes with which to buy such goods as are available? The communists believe in the collective ownership of consumers' goods, as well as capital and land, and would have these goods distributed directly among the people. Socialists, on the other hand, are more kindly disposed toward the use of money and the exercise of choice on the part of consumers.

Once the *method* of distribution has been decided, it becomes necessary to formulate a *principle* of distribution. Shall the national income be divided equally among the income-receiving citizens or shall there be differences in incomes, and if there are to be differences upon what basis

shall the differentiation be made and to what extent? Some socialists contend that all should share alike, although it is not always clear whether this means an equal share for every man, woman, and child or equal shares as between families. Sharing equally would probably mean, to these socialists, the equal sharing of money income, while real income would vary in composition from one individual or family to another. Many socialists recognize the difficulties of getting people to work hard, or to take the more responsible and important positions in our economic system, if all persons are to have equal incomes; and consequently they advocate that there be some variations in income as between individuals, based upon differences in ability, or efficiency, or both. However, most communists, and some socialists, hold out for an entirely different principle of distribution, urging that individuals should contribute to production on the basis of their ability and receive income on the basis of their needs. This might mean that those who contributed most heavily to production would draw the smallest incomes because their needs were slight. In general, we may consider the principles of equal distribution and of distribution according to needs, as ideals rather than practical proposals. In practice, a collectivistic economic system would probably have to tolerate an unequal distribution of income based upon the productivity of its citizens.

One thing seems certain, however. The degree of economic inequality which would exist would be very small as compared with that which we have today. Since society would own the land and capital, private individuals would not receive, under socialism or communism, any incomes from rent and interest. Of course, different pieces of land would vary in productivity under collectivism as under capitalism, but the fruits of these variations in productivity would be spread over society as a whole, whereas now they go to a relatively small group of landowners. Similarly, a collectivist society could not do without capital goods, but these goods would be furnished by society as a whole and the rewards for saving and waiting would be reaped by society as a whole. Since industries would be run by society, the enterprisers and managers would be servants of the state and would be paid a stipulated wage; they would not, of course, receive any income in the form of profits as at present. All income would be distributed in the form of wages, except that provision would have to be made, in some way or other, for those who were unable to contribute to production. While differences in income would probably be permitted on the basis of efficiency and ability, we may be quite sure that even the most important executives and managers would not draw incomes of \$100,000 to \$1,000,000 a year as some do at the present time. But wages *in general* would, under socialism or communism, be considerably higher than at the present time; for every worker would have in-

cluded in his wage his share of social rent and interest, in addition to the payment made for his labor.

Saving and Capital Formation. While socialism or communism would eliminate most competition, as we now know it, and would greatly limit the institution of private property, we must not assume that either form of collectivism would turn its back upon all features of a modern capitalistic economic system. Production would doubtless continue to be roundabout, large scale, and specialized in character, and would require large and increasing amounts of capital. Since collectivists frown on the receipt of interest by private individuals, the question may be asked as to how the necessary capital would be provided.

Capital formation, it will be recalled, depends upon saving. Under our present system, certain individuals must refrain from consuming to some extent, and must, in effect, elect to buy capital goods instead of consumers' goods with a part of their money incomes, if capital formation is to take place. In other words, in any society, the cost of obtaining capital goods, which will help to create a more abundant life in the future, is found in the necessity of getting along with a smaller quantity of consumable products at present than could have been obtained if the creation of capital goods had not been undertaken. In a collectivistic society, decisions as to how much to save would not be left, as at present, to private individuals motivated by the prospect of interest. Instead, the central authority would decide how much should be saved, and would carry out its decision by directing the use of a certain part of society's land and capital in the production of capital goods rather than consumers' goods. In this way, all the people would help to bear the cost of providing capital goods by having to put up with smaller real incomes currently than they would otherwise have received; and later on, when society's productivity had been enhanced by the use of this capital, presumably all would share in the greater national income.

Money and the Price System. Another pertinent question has to do with the extent to which a socialistic or communistic economic system would make use of money and the price system. Under communism it may be assumed that money and prices would not be used. Consumers' goods, when produced, would belong to society, as well as land and capital, and the consumers' goods would be distributed directly among the people in some arbitrary fashion, so that money and prices would not be needed. Labor would have to be directed arbitrarily into the proper occupations, unless we may assume that the better nature of men would cause them, under communism, to select the occupations in which they would be most useful to society. Similarly, society as a whole, through its representatives directing the system, would have to decide what goods should be produced, and in what quantities.

While some socialists have favored the use of labor certificates or

similar substitutes for money, most socialists are at present resigned to the use of money and to some dependence upon prices. For one thing, prices would probably be used under socialism to direct the labor supply into the desired occupations. Land and capital, being owned by society, could be arbitrarily distributed among different industries and occupations without any great harm being done. The labor supply, however, is made up of human beings who have home ties and other associations which would make it undesirable for the central authority to shunt them from one occupation to another and from one part of the country to another in an arbitrary fashion. Consequently, socialism would probably rely upon differential wages, as far as possible, to get labor to move from one industry to another and from one locality to another in order to keep the labor supply distributed in accordance with the changing needs of society. Thus, if more workers were needed in baking bread and fewer in producing motion pictures, the wages of bakers would be raised and those of motion picture workers lowered, until workers had shifted from one occupation to the other in desired numbers, or at least trained their children to become bakers rather than actors, directors, or cinematographers.

A socialistic system would probably also depend upon prices, to a considerable extent, to get the products of industry rationed among the people as consumers. The use of prices is probably the best way to allow consumers to choose what they will consume and to permit a variation in the composition of real income as between individuals. Since society would control both the total amount of money to be given to citizens and the prices at which products would sell, it should be quite possible to distribute the output of industry among the people while giving them considerable freedom of choice. The total amount of want satisfaction derived from the national income would probably be much greater, with the use of prices and the exercise of freedom of choice, than it would be if goods were rationed directly to the consumers in certain fixed quantities.

However, a socialistic system would rely less extensively than a capitalistic system upon prices. We have already seen that socialism would not depend upon prices to govern the total amount of saving and investment, or the distribution of land and capital goods among the several industries. Moreover, it would not allow prices to determine what to produce and in what quantities. The fundamental relationship now existing between prices and costs of production, under competitive conditions, would largely disappear under socialism. Since land and capital would be owned by society, any charges made to industries for the use of these agents would be purely arbitrary. Wages would be determined by the central authority as would also the prices of finished products. Under these conditions,

there would be no necessary relationship between prices and costs of production.

Let us suppose, for example, that an article produced under socialism did not, at a price equal to "cost of production," sell in the quantity in which it was being produced. Under capitalism this situation would be expected to lead eventually to a restriction of the productive capacity of the industry and a consequent reduction of output. Under socialism the output might be maintained or even increased if the central authority thought the commodity should be widely consumed by the people. Any "loss" on this article could be covered by selling other, less essential goods at prices higher than their alleged cost of production. Similarly, the ability to charge a price higher than cost of production for an article provides, under capitalism, an incentive to increase productive capacity and output but this would not be true under socialism. Capacity and output would be expanded only if this course of action appeared socially desirable for other reasons. Prices and costs under socialism would be used merely as bookkeeping devices to aid in planning production to meet the needs of the people, and in checking up on the degree of efficiency with which plans were carried out. They would be purely arbitrary amounts, as determined by the central authority. The price system, thus administered by the peoples' representatives, would be the servant of society and not its master.

POSSIBLE ACCOMPLISHMENTS OF COLLECTIVISM

The Wastes of Competition. Such are the features which would probably characterize a collectivistic economic system. We must now attempt to see what gains the collectivists feel would be realized in the way of increasing human welfare, through the adoption of collectivism. In the first place, collectivists are convinced that a system of this kind would eliminate most of the wastes of competition. Since production would be socially controlled, there would be little danger of competitive duplication of productive facilities and human efforts such as mark capitalistic economic systems. Every industry would be organized into productive units of the most efficient size, and no more units would be set up than were needed to turn out the socially desirable amount of goods. Advertising, if it existed at all, would be used for strictly educational and instructive ends. With production organized for use and not for profit, there would be little danger that productive agents would be used to make trivial goods so long as important human wants remained unsatisfied, or that industries which produced useless or harmful goods would be tolerated. Since production would be organized with the interests of society at heart, collectivists believe that human wants as a whole would

stand a much better chance of being completely satisfied under collectivism than under capitalism.

Individual and Social Interests. We have already said that, in a capitalistic system, the interests of individual enterprisers' often lead to the limitation of certain types of goods, while the best interests of society as a whole require these goods in abundance. This conflict of interests, collectivists say, would be eliminated under collectivism. Those who managed and directed the affairs of industry, being merely employees of society and unable to make profits for themselves under any circumstances, would have no incentive to restrict production in any industry. Their interests, like those of society, would be best served by producing in abundance. Moreover, it is said, collectivism would provide a remedy for the present practice of delaying the introduction of new inventions, in the interest of large profits, and consequently the best equipment and methods would be promptly available for all productive units.

It is argued, also, that the ordinary workers in industry would be more efficient under collectivism. Since they would be working for society instead of profit-seeking private enterprisers, they could count on getting their full share of the national income. As a result, labor unrest, strikes, boycotts, and other types of labor troubles should disappear. And since there would be work for all, and no fear of unemployment, there would be no incentive for workers to "soldier on the job" to make their jobs last, or to oppose the introduction of scientific methods, improved machinery, and labor-saving devices. By removing the greater part of the present conflict between individual and social interests, it is held, collectivism would contribute greatly to the efficiency of production.

The Elimination of Business Depressions. Under either socialism or communism, it is said that business depressions would be unknown. The supply of purchasing power under socialism would be completely controlled by the central government and would never be allowed to operate, as it sometimes does under capitalism, as a force making for business booms and depressions. Production would no longer be planless and chaotic, because decisions as to what and how much should be produced would no longer be left to thousands of independent and uncoordinated individuals as under capitalism. Final decisions of these kinds would be made by the central authority, and misdirected production would not occur unless the central agency made mistakes in gauging the desires of consumers or were unable to meet these desires. Since production under collectivism would still be roundabout in character and would still be undertaken for a future market, it would be quite possible for misdirected production to occur. However, with the selling prices of products completely under control of the central authority, it would be possible to induce consumers to take an unusually large output of some good off the market by lowering the price sufficiently or to restrict the consumption

of another good, limited in quantity, by raising the price. Since costs and prices would mean little in such a system, misdirected production, when it occurred, would not be a force making for economic depression.

Moreover, under collectivism there would never be an incentive to close down an industry or to reduce its output, unless the desires of consumers for its products were completely or very nearly satisfied. In other words, the time would never come under collectivism, as it does under capitalism, when business uncertainties could cause managers to discharge workers or put them on part time, to reduce purchases of materials and supplies, and to take the other steps which today lead to the vicious downward spiral of depression. Business managers, under collectivism, would be working for society, would not receive profits in any event, and would never reduce production unless instructed to do so. Thus, it is claimed, business depressions would under collectivism be only a bitter memory.

The Employment of Labor. It is contended that under collectivism there would always be employment for all persons able to work, while generous provision would be made for those unfortunate individuals who were unable to contribute to production. In fact, all who were able to work would be required to do so in order to receive any income. Under capitalism, the ability of workers to find employment depends upon whether those persons who control land and capital can make a profit by using the workers. Under collectivism, with land and capital owned by society, workers could always be used with profit to society so long as human wants were not completely satisfied. The cost of putting laborers to work in a given line of production is, from the social point of view, only the necessity of providing them with land and capital which could otherwise be used to produce other goods. In short, the only costs would be opportunity costs, and there would be plenty of employment for labor as a whole. And if society ever managed to produce more than enough goods to satisfy the wants of consumers, it would reduce hours of work for all citizens and allow all to enjoy more leisure time. There would still be employment for all.

Saving and Investment. Finally, it is contended that the twin processes of saving and investment would be much better coordinated under collectivism than under capitalism. Under the latter system, people often desire more funds for investment in industry than are currently being saved, so that the banks have to create extra purchasing power for investment purposes. At other times, savings pile up in our financial institutions and cannot find profitable investment. These evils, it is claimed, result from leaving these processes in the control of private individuals who react to price considerations. The processes not only are carried on wastefully, but they have important repercussions in connection with business cycles. Under collectivism, saving and capital formation would mean

merely that society would choose to direct a part of its productive resources into making capital goods rather than consumers' goods. Society would not be so silly as to deprive the people of consumers' goods at a given time unless there were a real need for further supplies of capital goods; and, on the other hand, society could always withhold from its citizens enough consumers' goods to make possible the creation of any required amount of capital goods, however large. Thus, saving and investment would really be a single process under collectivism.

CRITICISMS OF COLLECTIVISM

In considering the possible failures and weaknesses of collectivism, we turn first to the question of production on the basis of economic planning. Since the productive system under collectivism would make use of many capitalistic *productive methods and principles*, the basic issue in production concerns the probable effectiveness of *planned control over production* as compared with *control by the market and price mechanism*. In this connection, we are concerned with two matters: (1) the extent to which the results of planned production, if these results were attained, would meet the basic needs and desires of the people, and (2) the extent to which collectivism might be able to carry through successfully the program set up by the planning agency.

Difficulties of Economic Planning. On the first of these points, we cannot freely accept the conclusion of collectivists that planned productive results could scarcely be worse than those of unplanned capitalistic production. It is true, as we have suggested, that planned production would have some advantages over capitalistic production, but these do not include a guaranty that the results of economic planning, even if fully achieved, would be perfectly adapted to the basic needs and desires of the people—for planned production would have some difficulties which are distinctly its own. Under collectivism, many important economic decisions—such as the kinds and quantities of goods to be produced, the distribution of existing productive agents among industries and enterprises, and the sound allocation of productive resources in satisfactorily meeting the needs for present consumption and yet providing adequately for capital formation—must be made by the economic planners. These planners could not, of course, rely on the customary capitalistic guides of prices and costs in making these decisions; for prices and costs, if they existed at all, would not under collectivism be determined in a free market, but would have to be determined by a few planners and not by thousands or millions of persons bargaining independently as is normally the case in a capitalistic society.

Under these conditions, the important economic decisions would be made *arbitrarily* rather than *rationally*, in that they could not be based

on prices and costs as independent data. If the government (representing the people as a whole) is the sole owner and demander of productive wealth, there can be no real price determination for land and capital, hence no rational computation of costs, and therefore no rational allocation of these productive agents to the various industries of the economy. Furthermore, if the managers of collectivistic industries have no great discretionary powers and little financial responsibility in connection with production, rational risk-bearing by these managers is out of the question.

Arbitrary decision-making by the economic planners would be a considerable obstacle to the adaptation of production to basic human needs and desires. The planners would know, of course, that a large amount of a good is usually preferable to a small amount, but, having decided to produce a given quantity of a good by using given quantities of the productive agents, they could not be sure that this quantity of the good would give more satisfaction, in relation to its cost, than would the quantity of some other goods which could have been produced with the same amounts of the same agents of production. As the result of planning, a given quantity of a good would be produced and offered for sale at a given price, and the planners would observe that the consumers either did or did not eagerly purchase and consume it. But this knowledge would not be very helpful, since the demand for a particular good at a particular price, when other goods were not available or were available only in small quantities at high prices, would be quite different from the demand for this good when other goods were available in large quantities at low prices.

Again, if the planners had the choice of ordering the production of an economic good by either of two methods, each of which required a different combination of the agents of production, they could never be sure which method should be used. They might know and decide to adopt the method which produced the greater quantity of product, but they could not be certain that this method was actually superior on the basis of costs. Or if the planners were faced with the choice of two methods of producing a given good and knew that one method would produce a given amount of it after six months of preparation, whereas the other method would turn out a *larger* quantity after three years, the planners would be unable to make a completely rational choice between these alternatives in the absence of a market-determined rate of interest. They would certainly be expected to take the time factor into consideration, but again they could never be sure of the quality of their decision. In similar fashion, they could observe whether the people as consumers registered satisfaction or dissatisfaction over the planned decisions with respect to saving and capital formation, with the resultant limitations on currently available consumers' goods, but they could never be sure just how good or bad their decisions had been on the basis of the time-preferences of the individual people.

These considerations seem to indicate that, even in the absence of certain capitalistic shortcomings in the field of production, there would be ample opportunity for the total results of planned production to fall short of perfection in the matter of adaptation to human needs and desires. Nor is this the whole story, for we have thus far been assuming (1) that the planners are men of good will who struggle manfully to fulfill the desires of the people, and (2) that the total productive results attained are actually those which were planned. If the planners were proud in their wisdom and decided that they knew what the people wanted, or should have, better than the people themselves knew, the results of planned production might be most unsatisfactory to the people. Such dereliction from duty on the part of the planners would presumably be short-lived if the government of the collectivistic system were truly democratic, for the planners could then be removed from office at reasonable intervals if the people were dissatisfied with the results that were being produced. However, if the government turned out to be a dictatorship, so that the planners were safe in their jobs as long as they pleased the dictator or a small group of leaders, the total results of planned production might be far worse, from the point of view of the needs and desires of the people, than those which are experienced in our capitalistic system. Thus, the question of democracy in a collectivist government is a very important one in connection with evaluating the probable results of planned production.

Difficulties in the Execution of Plans. Whether or not the economic planners were responsive to the will of the people, it could scarcely be expected that the actual results of planned production would be precisely those which had been planned. Even if the technical efficiency of governmental enterprises under collectivism could be maintained at a reasonably high level, the fact remains that some matters could not be controlled by economic planning. Even under economic planning, many phases of production would be subject to the influence of uncontrollable natural phenomena. For example, unusually favorable or unfavorable weather conditions would greatly affect the yield of certain crops, and indirectly the output of industries which were dependent on these crops for their supply of raw materials. Wars, or even changes in the outlook for peace, might cause actual production to vary significantly from the original planned estimates; and much the same thing would be true of technological improvements if they were introduced into industry about as fast as they were developed or discovered.

Moreover, it is not certain that the technical efficiency of production *could* be maintained at a high level under collectivism. The economic plans would have to predict the activities of millions of human beings, and the planners could never be confident that these people would behave exactly as they were expected to behave in various situations. If

the collectivistic system proved unable to furnish adequate incentives to individuals, the technical efficiency of productive activities might be seriously impaired. In summary, it does not seem possible to predict with great accuracy just how well the total results of planned production would compare with those of our capitalistic system. Certainly it is difficult to see that there is any great *assured* advantage for socialism in this respect.

The Distribution of Income. In spite of the communistic ideal of distributing income on the basis of needs, we have seen that the probable distribution of income under collectivism would feature moderate differentials between individuals on the basis of productivity. However, since individuals would no longer receive income from the ownership of land and capital, unearned incomes in general would be eliminated, and differences in income as between individuals would be very small in comparison with those which exist in our capitalistic system. These results, in and of themselves, would probably be approved by a rather large number of people.

The chief problem in connection with collectivistic distribution of income is whether the proposed moderate differentials in income would be consistent with the collectivists' desire to maintain and expand the total national income. That is to say, would the small differences in income which collectivism contemplates provide adequate incentives for all? If individuals under collectivism lacked incentive to work efficiently, to manage enterprises and industries efficiently, and to invent, contrive, and improve machines and methods of production, the total national income might fall well below that which is produced under capitalism. It is obvious that, if the total national income were too small, it could be divided ever so fairly and yet fail to provide a high level of economic welfare for the people.

With wages for ordinary grades of labor paid largely on a piecework basis, it is possible that differences in wages at the lower end of the collectivistic income scale would be about as adequate as they are under capitalism in providing incentives for ordinary workers. It is far less certain that the modest "upper-bracket" wages proposed by collectivists would be sufficiently high to induce managers and directors of large-scale governmental enterprises, inventors and research specialists, and high-grade professional workers to exert their best efforts. The collectivists obviously think that moderately high wages for such persons would work out satisfactorily, but this is a matter that can actually be determined only by experience.

The collectivists contend that individuals, regardless of the difficulty and responsibility of their work, would not object to being only moderately well off if there were no extremely rich people with whom they could compare themselves unfavorably. Collectivists do not expect individuals who were accustomed to receiving large incomes under capitalism ever to

be fully satisfied with the smaller economic rewards allotted for the same work under collectivism. But they say that as soon as a new generation has come along, composed of individuals who know nothing about the large income differentials which formerly prevailed under capitalism, people would work just as hard and efficiently for the small income differentials of collectivism as under any other system of rewards. However, these arguments are far from convincing.

In any case, the collectivists do not intend to rely entirely upon differences in wages to provide incentives to work. They intend to minimize the importance of economic motivation, while developing other types of incentives extensively. Among the motivating forces which would be emphasized are power, prestige, public honors and acclaim, pride in work, the joy of creation, extensive opportunities for education and training, jobs well fitted to individual abilities, pleasant and interesting work in advanced positions, the filling of advanced positions on a merit basis, relief from the dangers of social insecurity and unemployment, idealism, altruism, devotion to the cause, and ultimate compulsion and penalties.

Just how well this system of moderate differences in wages, combined with a host of other incentives, would work out in practice cannot be determined in advance. Fundamentally, the answer depends upon the question of whether people behave acquisitively under capitalism because selfishness and acquisitiveness are an inherent and unchanging part of their nature, or whether this behavior under capitalism is produced largely by environmental and institutional conditions peculiar to that system. While the final answer to this question will come only from experience in trying to run a collectivistic system, we incline to the view that such an economy might encounter serious problems in the field of incentives which would cause it to be torn between its desire for efficiency in production and its desire for equalitarianism.

Economic Stability. There is little doubt that the planned economy of collectivism would have some advantages over our capitalistic system from the point of view of economic stability. It should be possible to keep a planned economy operating after a fashion without severe breakdowns or depressions and unemployment. If the productive results which were planned could always be attained in practice, there would really be no problem of economic stability at all under socialism or communism; but, as we have seen, there are factors which might cause the actual productive results to vary substantially from the results that were planned. Under these conditions, depressions and unemployment might be avoided, but the advantages of a collectivistic economy in this respect would not be nearly so great as they seem at first glance to be.

Consider, for example, a simple possibility. In an economic plan, the production of coal, coke, and iron ore would have to be coordinated with that of steel, automobiles, tractors, and machinery; but in practice one of

the many things which might happen in any economy could keep the production of coal and iron ore from actually reaching anything like the planned estimates. What effect would this deviation from plan have on the steel industry, and other industries which require large quantities of steel? It seems clear that these industries, at least temporarily, would have some unused productive facilities and some unnecessary labor. But, say the socialists, these conditions will not be allowed to spread to other major industries, because any price adjustments that might be necessary will be made promptly and the purchasing power of workers in the steel industry and other industries using steel will be maintained.

This sounds reassuring, but what could the planned economy do for these workers? It could spread the work in the steel industry, and in other industries which use steel, by shortening hours of work while maintaining wage payments—but something of this sort could be done even under capitalism. If, as seems more logical, some workers were temporarily displaced from the steel industry and steel-using industries, it is contended that there would be no unemployment which would contribute to depressed conditions in other industries because the planned economy would find other jobs for the workers. This it could do, because it would employ workers as long as their products were desired by consumers and not merely so long as it could make profits by using their labor.

But how quickly could other jobs be found for these workers, and what kinds of jobs would they be? If the workers could not be placed in other jobs quickly, the demand for the products of other industries might suffer. Moreover, it might often be necessary to reemploy the workers in jobs in which they would turn out products that, although they would be taken off the market by consumers, could not be produced on the basis of prices and costs, if these prices and costs were determined in a free market. Such submarginal jobs would prevent unemployment, and it would probably be better to have the workers employed in them than to have them unemployed; but the difference between giving the workers employment in submarginal jobs under collectivism and giving them employment in raking leaves, digging holes, and mending streets under the W.P.A. in our capitalistic system is not so very great.

All this, of course, does not mean that a collectivistic economy would have no advantages over a capitalistic economy in the way of economic stability. Some factors which under capitalism are important in connection with business depressions and unemployment (such as the overexpansion of bank credit and the tendency for competitive industries to overshoot the mark with regard to total quantities of productive facilities) would be eliminated or controlled under collectivism. However, the fact remains that, until it is possible for planned productive results to be perfectly realized in practice, there are opportunities for grave maladjustments to occur under collectivism. And in the face of such maladjust-

ments it is entirely possible that a collectivistic economy would operate to conceal business depressions rather than to eliminate them.

The Issue of Freedom. Finally, it is commonly urged that collectivism would be undesirable because it could succeed, if at all, only through regimentation and the subordination of the individual. In the first place, there is a grave question whether economic planning is consistent with political democracy. Full-fledged economic planning seems to require that enormous powers for making and enforcing decisions be centralized in a relatively small group of economic planners near the top of the system. Under capitalism, it seems that government officials and agencies are seldom willing to relinquish powers which have once been granted to them, and persons in high governmental posts are usually loath to give up these positions unless and until compelled to do so by the workings of the electoral process. If human nature would not be profoundly changed under collectivism, there are grounds for believing that the planners might become convinced of their own omniscience as planners, and that they would plan above all to keep themselves in office as planners.

Of course, the collectivists are not disposed to admit that this danger is serious. They seem to feel that human nature would be so thoroughly changed under their system that individuals who had been granted enormous powers as planners would cheerfully surrender these powers at the end of a short period of years, if their services as planners had not been satisfactory to the citizens. However, it seems to us that the psychological atmosphere under economic planning might not be favorable for a prompt change of plans and the admission of errors in planning, if the change and admission were likely to cost the planners their jobs. Since errors would be made and plans would have to be changed from time to time, it seems likely that the planners would try to achieve monopoly powers over their jobs. While admitting that, in theory, economic planning is compatible with democracy, we believe that there is a great danger that it would be associated with dictatorship in actual practice. And this, of course, would be quite enough to ruin the socialistic system from the point of view of those who believe in "government by consent of the governed."

From the economic point of view, the individual would not be free under collectivism to follow his self-interest in his own way. He could not establish an enterprise in a field of his own choosing, and decide how much or how little to produce, nor would he be allowed, as under capitalism, to pile up wealth and dispose of it as he saw fit. Under collectivism the economic interests of society would be superior to those of individuals. It is better by far, say the exponents of individualism, to have liberty and possible poverty than to enjoy a more comfortable, assured income at the cost of one's economic freedom.

The collectivists admit that various economic rights exercised by the

individual under capitalistic institutions would be eliminated under collectivism. However, the collectivists contend that these rights—such as the right to found an enterprise, to own great wealth, or to receive a large income—mean comparatively little to most individuals under capitalism. The individual has these rights under capitalism from a *legal* point of view, but he is often economically unable to take advantage of them. Under collectivism, the individual would retain the rights which are most important to him under capitalism—the right to choose his own occupation out of the many that are available, and the right to spend his money income for any commodities and services which please him.

But we may well ask whether freedom of occupational choice and consumption choice is compatible with economic planning. It is difficult to see how the individuals of any economic system could have complete freedom in both of these respects at the same time, except in that most improbable case in which the commodities and services which the individuals in the system desired to consume were precisely those economic goods which the individuals as producers desired to turn out. In the more usual case, individuals as consumers will greatly desire some commodities or services whose production is most unpleasant, while some occupations which people would gladly follow as producers will result in the creation of commodities or services which the people as consumers do not greatly desire. Of course, a sort of adjustment of these conflicting interests is achieved under capitalism by means of the relative prices of various commodities and services and the relative wages in various occupations, but the resulting ranges of products and of occupations are never those which the people would have freely chosen on a non-price basis.

Under collectivism there is the added problem of relating both of these “freedoms” to economic planning. What the socialists probably mean by freedom of consumption choice is that, though the total range of commodities and services which it is deemed worth while to produce will be determined by economic planning, individual consumers will be given as much freedom as possible to spend their money incomes for any commodities or services within this range. In like manner, the total range of occupations which it is considered necessary or desirable to carry on in the economy will be determined by economic planning, but the individuals as workers will have a free choice among all the occupations within the socially approved range. Intelligent economic planning, then, will keep the total range of commodities and services and the total range of occupations consistent with each other. Outside of these planned ranges, there will be no freedom at all. No individuals will be able to consume yachts or mink coats if these commodities are not included in the planned range of goods to be made available to the people, and the individual who wishes to be an adagio dancer or a magician will similarly be out of luck if such occupations have not been provided for in the economic

plan. Thus it would seem that the individual's occupational and consumption choices, while free within a certain range, would on the whole be considerably limited under collectivism.

CONCLUSION

In attempting to evaluate collectivism as a working economic system, we are faced with imposing lists of advantages and disadvantages, of assets and liabilities. An economic system which worked out exactly in accordance with the *theory* of collectivism might be regarded by many as better than our capitalistic order; but it is far from certain that the champions of theoretical collectivism would rate it so highly if they knew in advance how it would actually function. Though collectivism offers some sort of workable alternative to capitalism, the question of how well or how badly it would operate in the United States, as compared with our existing capitalistic system, simply cannot be answered unless we should sometime decide to try it out. We have already noted the growth of what has been called a "world trend" toward collectivism.³ However, there is no evidence that the people of the United States, as a whole or in substantial numbers, have any desire to give up capitalism for the thoroughgoing socialism of Soviet Russia or even the modified socialism of England.

It seems clear that, in any attempt that might be made to persuade the people of this country to adopt collectivism in place of capitalism, the latter would hold important advantages, among which are a long tradition of individualism and a generally high standard of living. A democratic society may be expected to choose for itself the form of economic organization which it regards as best. If, then, the supporters of our present system will undertake to see to it that capitalism is operated in such a way as to win and hold the respect and backing of the people as a whole—by providing equality of opportunity for all, and a large measure of the "good life" for the rank and file, in addition to exceptional rewards for individuals of unusual ability—capitalism should have no difficulty at all competing with collectivism or any other "ism." It is hard to imagine a greater aid to the continuance of a given type of economic society than the conviction, on the part of its members, that it has more to offer than has any other system of economic organization.⁴

Capitalism in the United States in 1975 will doubtless differ considerably from the capitalism of 1925, but if American capitalism is prepared to remedy, from time to time, economic maladjustments of the kinds we

³ Cf. p. 119 (vol. 2).

⁴ "Our system of private enterprise is now being tested before the world. If we can prove that it is more productive and more stable, more generous and more just than any other economic system, we shall have won the test."—President Harry S. Truman, addressing The Associated Press, April 21, 1947 (*The New York Times*, April 22, 1947).

have been examining in this book—maladjustments which, as we have repeatedly urged, can be corrected within the framework of a capitalistic economy—and thus make such modifications as a democratic people may demand because of economic changes that have taken place, we see no reason to fear for the survival of the American system of free enterprise. We can think of no surer safeguard against collectivism than a capitalism so productive and so fair that it commands the enthusiastic approval of the electorate.

1. Why do collectivists think that the capitalistic type of economic system must be abandoned?
2. List the characteristics of collectivism in general.
3. On what grounds do collectivists condemn the capitalistic system of distribution?
4. What is meant by "the competitive wastes of capitalism"? Explain.
5. Are periodic business depressions inevitable under capitalism? Why or why not?
6. State briefly the nature of the major theories of Karl Marx.
7. Are these theories generally accepted today? Explain.
8. Distinguish briefly between socialism and communism.
9. Why do socialists and communists believe that land and capital should be owned by society?
10. How would land and capital be brought under social control?
11. What is meant by "the collective management of land and capital"?
12. How would the national income be distributed under socialism? Under communism? Explain.
13. Compare saving and capital formation under socialism or communism, with the same processes under capitalism.
14. To what extent would a socialistic economy make use of money and the price system? Why?
15. Why might a collectivist society have less need for a price system than a capitalist society?
16. Why is it claimed that collectivism would eliminate the competitive wastes of our present system?
17. Could collectivism reconcile individual and social interests? Explain.
18. Would business depressions occur under collectivism? Why?
19. Why would collectivists expect to have a full employment of labor under their system?
20. What problems would a collectivist economy encounter in trying to adjust planned productive results to the needs and desires of the citizens? Explain.
21. Why is the question of democracy in government under collectivism a very important one in connection with evaluating the probable results of planned production?
22. Could the actual results of planned production under collectivism be expected to be precisely those which were planned? Explain.

23. What is the leading problem in connection with the proposed distribution of income under collectivism? Explain.
24. How well would you expect the collectivist system of moderate differences in wages combined with a host of other incentives to work out in practice?
25. Would a collectivist economy probably operate to eliminate business depressions or only to conceal them? Why?
26. Would collectivism in economic matters be compatible with democracy in government? Explain.
27. Do collectivists promise more than they can deliver when they say that, in their system, individuals will have freedom of both consumption and occupational choice? Explain.

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Socialism in Soviet Russia

FOR TWENTY YEARS, SOVIET RUSSIA HAS AFFORDED AN INTERESTING AND important example of a nation operating as a planned economy. So long as no country actually attempted to operate on a socialistic basis, discussions of the methods and possible achievements of a planned economy were highly theoretical. But Russia—or the Union of Soviet Socialist Republics, as it is now officially called—has provided a modern example of collectivism. With a land area of over 8,000,000 square miles and a population of 193,000,000 in 1940, Russia has undertaken to substitute a socialistic economy for the capitalistic economy of her past. Hence, the Soviet economy is deserving of careful study.

Early Developments. Russia did not become a planned socialistic economy overnight. Soon after the capitalistic order was overturned by the revolution of 1917, an attempt was made to establish an economic system that would use none of the customary means of economic control. Money and prices were to be discarded. Consumers' desires were to be provided for through a system of rationing, and producers' needs by deliveries against special warrants. Nationalized factories were to furnish supplies of the various kinds of economic goods, while the Supreme Economic Council estimated the kinds and quantities to be produced. Industrial conscription was to be employed, to a considerable extent, to insure that workers performed the proper tasks. Russia had never achieved great success as an industrial nation even prior to World War I, and under this unprecedented and untried type of economic system economic activity fell off to a small fraction of even its pre-war level.

In 1921, a new economic policy was adopted which restored money, prices, and buying and selling activities, and economic planning was attempted on a modest scale. Production revived gradually under this new policy, and by 1927 it had about reached its pre-war level. At this time, the first Five-Year Plan was drawn up, providing for a comprehensive program of economic planning. This Plan was announced as "completed" early in 1932, after a little more than four years of operation. The U.S.S.R. (as the Soviet Republics are commonly called) completed its second Five-Year Plan by 1937, and the third of these Plans was scheduled for completion in 1942, only to be rudely interrupted by the outbreak of the war with Germany in mid-1941. No new Five-Year Plan was attempted while

World War II was in progress, but a fourth, to run from 1946 through 1950, was announced early in 1946. Before describing economic activity as it is carried on in the U.S.S.R., it will be necessary to examine briefly the present government of the country.

THE GOVERNMENT OF THE U.S.S.R.

The Communist Party. Any account of the government of the U.S.S.R. which failed to describe the nature and importance of the Communist party would be incomplete indeed, for the government and the party are one and indivisible. The Communist party, in other words, has outright control of political and economic life in the U.S.S.R. Though the party contains only about 5,000,000 regular and probationary members,¹ or something over 2 per cent of the population, and though non-Communists are allowed to vote and are sometimes elected to political office, most of the important economic and political positions in the country are, in fact, held by party members, and the party formulates all of the important policies which are carried out by the government. It is the only political party permitted to exist in Russia today.

New party members are drawn almost entirely from the various youth organizations of the party, which include about 17 million members according to one estimate.¹ These organizations are the Comsomol, or Young Communists, aged 15 to 26; the Young Pioneers, aged 11 to 15; and the Little Octobrists, aged 8 to 11. The party is highly organized, the organization progressing from factory, farm, village, and city units, through district and regional congresses, to the All-Union Communist Party Congress. The Congress elects a Central Executive Committee of 71 members, and it is largely in the committees of this Central Executive Committee (the Organization Bureau, the Secretariat, the Central Control Commission, and especially the Political Bureau of 10 members) that the control of the party actually lies.² Membership in the party is something of an achievement. A person is placed on probation for a period before being taken into regular membership, and the party has periodic "purges" which are intended to rid it of members who fail to live up to party standards. The party insists upon conformity to standards of personal conduct, as well as enthusiastic participation in party and civic activities, and enforces rigorous discipline within its ranks.

The Governmental Organization. The government of the U.S.S.R. operates on the basis of a constitution which was ratified late in 1936. The legislative powers of the government are exercised by the Supreme

¹ D. J. Dallin, *The Real Soviet Russia*, New Haven, Yale University Press, 1944, p. 214. It is only fair to say that estimates of membership in the Communist party and its youth organizations vary widely from one source to another.

² *Communism in Action*, 79th Congress, 2nd Session, House Document No. 754, Washington, Government Printing Office, 1946, pp. 95, 96.

Council, composed of two houses, the Council of the Union and the Council of Nationalities, each having about 600 members. The Council of the Union is elected by the citizens, on the basis of one deputy, or representative, for every 300,000 citizens. The Council of Nationalities includes twenty-five deputies from each Union Republic, eleven from each Autonomous Republic, five from each Autonomous Province, and one from each National Region. All terms of office are four years in length, and the two legislative houses have equal rights. Laws are passed by a simple majority in each house, and each house elects a Chairman and two Vice-chairmen.

The Supreme Council selects the Presidium, which is really a committee of the legislative body, and has 42 members. The Presidium has certain powers, such as the power to disband the Supreme Council in the event of permanent disagreement between the houses, to call new elections, to call the Supreme Council into session, and to exercise many of the legislative functions of the Supreme Council when that body is not in session. The highest executive or administrative organization of the U.S.S.R. is the Council of Ministers, which is selected by the Supreme Council and is responsible to it. It is composed of a Chairman (Stalin), 8 Vice-chairmen, 45 Ministers and 3 other officials.² The State Planning Commission, which is the chief agency for economic planning, is a Committee of the Council of Ministers. Justice is administered by the Supreme Court of the U.S.S.R., the Supreme Courts of the Republics and Autonomous Regions, and the People's Courts. The several Supreme Courts are selected by the Supreme Councils of the U.S.S.R. and its constituent republics and regions, but the People's Courts are elected by direct vote of the citizens in the various districts. Every Union Republic and Autonomous Republic has a governmental setup almost identical with that of the U.S.S.R.

The government of the U.S.S.R. is federal in form, but power is concentrated largely in the central government. The central government controls all external affairs of the country, including a monopoly of foreign trade, and internally controls the planning of the national economy, approves the budgets of all governmental units, administers banks and all productive or business establishments which are of All-Union importance, administers transportation and communication, controls money and credit and the use of land, provides a single national system of accounting, controls education and public health, and establishes principles of labor legislation and of legislation governing the judicial system and procedure. In recent times, moves have been made in the direction of giving greater powers than formerly to the lower units of government, but it remains to be seen whether real or merely paper changes will be the result.

It is clear that, under the present government, the legislative, executive, and judicial powers of the government are exercised by separate organizations, though the legislature is superior to the other two departments of

government in power and authority. Direct elections are substituted for the indirect elections which prevailed prior to 1936. Even members of the Supreme Council are elected directly, whereas the legislature in former times was several stages removed from the actual voters. Suffrage is universal for persons 18 years of age and over, with the exception of the insane and persons deprived of electoral rights by court sentence. All classes of voters have equal rights of representation in the legislative bodies, and elections are by secret ballot. However, there is still much economic rather than geographical representation, for this principle is fundamental to the Russian system.

Under the present constitution, equal rights are guaranteed to all citizens. All are granted freedom of speech, freedom of press, freedom of assembly and of holding mass meetings, freedom of street processions and demonstrations, and freedom of religious worship. Citizens are guaranteed inviolability with respect to their persons, homes, and correspondence. Going beyond the constitutional provisions of other countries, the Russian constitution guarantees the citizens employment and payment for their work in accordance with its quantity and quality, the right to rest and leisure, the right to maintenance in old age, sickness, and accidents, and the right to education. Women have equal rights with men in all spheres of life.

The Dictatorship. In theory, then, the present Russian constitution and government appear most enlightened and democratic. In practice, the people of Soviet Russia live under a dictatorship, as they did before the present government was established. In theory any person, whether a member of the Communist party or not, may run for office. In practice, all candidates save one in each electoral district usually resign before an election is held, and the one remaining candidate is the fortunate individual who is approved by the Communist party. In the first election under the present constitution, more than 100,000,000 voters, or almost 97 per cent of those eligible, went to the polls, and all but 632,000 voted for the single candidates available in their districts. However, the Supreme Council elected in this manner contained 273 non-Communists. In the election of February, 1946, about 110,000,000 voters went to the polls and again showed startling unanimity in voting for the official candidates. The legislature usually votes unanimously for any party-sponsored projects which are placed before it.

Political crimes are regarded as the most heinous offenses that can be committed in Soviet Russia, and the dreaded secret police work day and night to ferret out persons suspected of political crimes and subversive activities. Prior to 1941, when he chose himself as Minister of Defense and Chairman of the Council of Ministers, the Russian dictator, Stalin, did not bother to hold any important official position in the government, but as General Secretary he ruled the Communist party which in turn

controlled the government. In short, as someone has said, the people of Russia "have absolute power provided they do as they are told by the leader through the instrumentality of the party."

THE PLANNING AND CONTROL OF INDUSTRY

In considering the operation of Russia's economic life, we must bear in mind that Russia is under a socialistic system. That is to say, land and capital are socialized and are owned by society, the former entirely and the latter largely. Therefore, it falls to the lot of society, working through the established agencies of government, to plan and direct the use of these basic means of production. In noting how these plans are made and carried out, we shall consider agriculture separately, for the arrangements in agriculture are quite different from those in manufacture.

Industrial Organization. Though there are some differences as between industries in the field of manufacture, the general outlines of industrial organization are quite clear. The individual enterprises or factories, operated by governmental units or cooperative organizations, are formed into trusts or combinations, sometimes one trust to an industry but usually several. The trusts exercise a considerable measure of control over the factories, and for some purposes the trust, rather than the factory, is the industrial unit. For example, the trust controls raw material supplies for its factories and markets their output. The price paid for such output is determined for the trust as a whole, rather than for individual factories. The trust also appoints managers for the individual plants, approves wage contracts, and requires the plants to use the most efficient methods available, interchange technological experiences, standardize their products, keep accounts and stocks of goods properly, and make full use of their resources.

Over the individual plants and trusts in an industry, a higher organization called an administration is found in some cases. This agency supervises the work of the subsidiary organizations and sees to it that the industry as a whole carries out its part in the general economic plan. Subject to the main economic plan, each administration supervises and controls the construction of new productive facilities, the use of the profits made by the trusts, and the accounting methods used by the lower organizations, besides appointing boards of directors for the trusts, engaging in research work, training personnel, and levying fines and penalties on the lower organizations. In such cases, several industries and their administrations are grouped under a Ministry, or department of government and economic activity, headed by a member of the Council of Ministers which we mentioned previously as the highest administrative agency of the government. In other cases, the individual plants and trusts in an industry are responsible to departments, and these agencies in turn to a Ministry

which, in these cases, has charge of just one industry instead of a group of industries.

The Method of Planning. The general objectives to be undertaken by the economic system are planned by the heads of the Communist party for several years at a time. Within the general outline of such objectives, Five-Year Plans (and subsidiary annual plans within the Five-Year Plans) must be drawn up in detail for the economy as a whole, and for each organization or unit within the system. When a new Five-Year Plan is to be constructed, the State Planning Commission, a subsidiary of the Council of Ministers, draws up a first draft on the basis of a mass of statistical evidence gathered for the Commission by several other agencies. The Plan is then broken up into parts, which are handed over to various subsidiary planning agencies connected with such functional units as Ministries, administrations, trusts, and factories, on the one hand, and such geographical units as republics, provinces, regions, and communities, on the other.

The parts of the Plan are examined at each of these various functional and geographical levels, and criticisms, suggestions, and counter-proposals are offered, ostensibly for the guidance of the State Planning Commission. The parts of the Plan, together with the proposed changes, are reassembled in the hands of the Commission, which makes the final draft of the Five-Year Plan. After the final draft is approved by the officials of the Communist party and the Supreme Council, it is again divided up, and appropriate sections are sent back to the various functional and geographical units, so that each may know exactly what is expected of it for that period.

Since the State Planning Commission is composed of a President, a Board of eleven members, and a Council of about seventy persons selected from among the noted scientists, engineers, economists, and cultural leaders of the economy, and since it has a staff of several thousand technicians, statisticians, and clerks, it is probable that the Commission itself does virtually all the planning under the Russian system. The complicated procedure used in formulating the Plans probably exists for the purpose of creating enthusiasm for planning, giving many citizens a feeling that they are participating in the management and direction of the economy, and occasionally getting various factories or trusts to undertake greater productive feats than the Commission would have required of them. The Plans themselves are very bulky documents. The first Five-Year Plan totaled some 1600 finely printed pages, and the second totaled 1300 pages.

Under the Russian planned economy, the activities of every industrial unit are obviously quite closely circumscribed. A plant is given a specified output to achieve, or to exceed if possible; it is told the amount and kinds of labor it may have and the wages to pay, the amount of working capital which it is granted or may borrow, what is to be done with this capital,

the amounts of materials and supplies it may have and at what prices, and the agency to which it is to sell its output and at what price. It is clear that the Plans are both physical and financial in character. From the physical point of view, they are a matter of so many units of output, so many workers of various kinds, and so much land and capital. From the financial point of view, both selling prices and costs of production are predetermined for the several industrial units.

It is something of a problem to set prices at which goods are to be sold to the governmental agencies which then proceed to distribute them to consumers. If the government should set any one price for all concerns making certain products, some concerns could make profits without striving greatly for efficiency, while others would be unable to cover costs no matter how hard they tried. On the other hand, to specify different prices for identical goods produced in different factories would lead to many complications. The problem has been solved by having every trust take over the output of its individual factories and sell it at one price established by a price-fixing commission. This price is supposed to be sufficient to cover the planned costs of the subsidiary factories as a whole and the costs of running the trust, and to provide also for the payment of the "turnover" tax from which the government derives a large part of its revenue. The trust then computes what part of the price must be turned over to the individual factories to cover the money costs which they must meet, and the remainder is retained by the trust itself.

The Relation of Prices and Costs. We see, therefore, that money is used in the U.S.S.R., and prices and costs are expressed in terms of money, but the relationship between prices and costs in a capitalistic order like the United States of America is very different from their relationship in Russia. The prices that Russian productive establishments are allowed to charge are usually supposed to cover costs and yield a profit, given normal efficiency on the part of the productive units; but these prices are not necessarily the same as those charged to consumers. In some cases, the prices charged consumers are less than those received by the industries, so that the government is, in effect, subsidizing these particular industries. In other cases the reverse is true, and the government reaps a profit on its sale of certain goods to consumers. Of course, when profits are made under the Russian system, they do not go to private individuals as in this country.

Another important point is that the relationship between costs and prices does not control production in the U.S.S.R. In our system, if the price at which a good can be sold to consumers is for a long time too low to cover costs of production, the quantity produced will be restricted; and the receipt of prices which are more than enough to cover costs of production will have the opposite effect. In Russia, however, production is controlled by the government and it may be

decided to increase production in a non-profitable industry or to decrease it in a profitable industry, if such measures appear to be desirable from the point of view of public welfare. Prices and costs are used merely as accounting devices in Russia. They furnish a convenient medium for expressing the content of plans for different industries, and for comparing the results achieved. Since each productive establishment has its costs and prices determined for it, it makes or does not make unplanned profits according to the efficiency with which it operates. A lack of profit in a particular year may mean little or nothing with regard to efficiency, but long-continued losses by a productive establishment are at least *prima-facie* evidence of faulty operation. Such losses might lead to a reorganization of an establishment or to a change in management, but the fact of a profit or loss plays little part in influencing decisions of the government as to what goods shall be made or the quantities in which they shall be made.

The Problem of Planned Production. In our own system, consumers express the relative strength of their desires for different economic goods through their willingness to pay high or low money prices, and producers presumably are guided by these prices into producing the goods most desired by consumers. But in Russia the government, through the State Planning Commission, decides what shall be produced and in what quantities; and the important question is how well production can be adjusted to meet the desires of the people as consumers under this system. In part, this coordination depends upon the temper of the planning authorities. If they decide to devote the productive resources of the country to building up a huge war machine or to supplying the country with large amounts of capital goods immediately, consumers' wants may go largely unsatisfied for a time. However, if the authorities undertake to adapt production to consumers' desires, a very considerable degree of success may be achieved. Up to the present time, it has been relatively easy to dispose of the things which were produced, because the Russian people were so desperately in need of all kinds of goods when planned production was started. Later on, when basic wants are more nearly satisfied, the problem of adjusting production to human desires may become a more serious one. However, it should be emphasized that, if maladjusted production should come about, it would not lead to a breakdown of the system. For the government controls prices and can always get rid of goods by lowering prices sufficiently or discourage their purchase by raising prices; and eventually, of course, it may be possible to adjust production so that it will be closely related to consumers' desires.

The planning authorities can obtain some measure of the success of their production policies in satisfying human desires by observing the alacrity or reluctance with which consumers take economic goods off the market. In the past, however, such information was not completely reliable, for the

Russian government rationed certain commodities among the consumers at artificially low prices. Under these conditions, neither the demand for rationed commodities nor that for non-rationed commodities gave an accurate picture of consumers' desires. Since people were allowed to buy only certain quantities of the rationed commodities, it was impossible to decide how much more of their incomes they would have spent on these goods had they been permitted to do so. On the other hand, their purchases of non-rationed goods may have been much greater, *because some commodities were rationed*, than they would have been if the people had been free to spend their incomes as they desired. After the rationing of consumers' goods in the U.S.S.R. had been discontinued, the reactions of consumers to planned production at planned prices became a safer guide for the planning authorities than formerly.

Some hope for success in the adjustment of planned production to human desires arises from the fact that the planning authorities in Russia are able to avoid some of the pitfalls of capitalistic systems. Without any great effort, the authorities decide that luxurious yachts and limousines shall not be built so long as the people have unsatisfied wants for food and clothing. It is similarly easy to decide that worthless patent medicines and other harmful goods shall not be made while the people lack adequate housing. It is possible to standardize the products turned out, instead of permitting the production of many competing varieties, and, of course, productive resources are not wasted in creating competitive advertising designed to lure customers from one brand of a product to another or even from one product to another. Finally, having decided the volume of output to be achieved in each industry, the planning authorities can see to it that the productive facilities of the industry are only sufficient to insure this output. The output decided upon may or may not be the proper quantity from the point of view of consumers, but in any case it is possible to provide for the amount planned without the wasteful duplication of productive facilities that is characteristic of competitive economic systems.

AGRICULTURE IN THE U.S.S.R.

Agriculture in the U.S.S.R. is planned in much the same way as manufacturing, but the government does not operate agricultural establishments to the same extent as industrial establishments. The government owns farm land as it owns other kinds of land, but it actually directs only a relatively small part of agricultural production. For the most part, reliance is still placed in individual initiative and the incentive of pecuniary rewards to induce the farmers to produce in abundance.

The State Farms. Soviet Russian agriculture is organized in three forms. First there are 3961 state farms, with an average sown area of 6651 acres.³

³ *Ibid.*, p. 73.

These are operated directly by the government through agricultural trusts, and their organization is sufficiently similar to that of the manufacturing industries to make a detailed description unnecessary. The total output of these farms must be turned over to the appropriate governmental agency at specified prices, and the farm workers are paid wages. When the state farms were first set up, the emphasis was on great size. The minimum size was about 5000 acres, and some farms, in grain production, "embraced hundreds of thousands of acres, with huge fleets of combines, batteries of searchlights for night work, radios sending orders to the harvesters encamped for weeks in the distant fields, and airplanes bringing their medicines, magazines, and entertainers."⁴

Since the state farms, under the first Five-Year Plan (1928-32), increased rapidly in number and in the proportion of the total cultivated area which they controlled, it was widely assumed that a gradual shift of agricultural activity from other types of farms to state farms was desired by the government. However, the large state farms were inefficient, as was indicated by poor crops, a heavy mortality rate for livestock, frequent changes in officials, and high labor turnover. As a result, some state farms have been broken up into smaller collective units, and the percentage of the total cultivated area controlled by the state farms declined from 12.1 in 1936 to 8.9 shortly before World War II.⁵ This may mean that Russia intends to depend permanently on collective or cooperative farms for most of her agricultural production.

The Collective Farms. Collective farms are the most important type of farm organization in the U.S.S.R. They vary in size from a dozen to more than a thousand peasant households each. The average collective farm contains about 75 peasant families and 1198 acres of land.⁶ Under the usual form of organization, the peasant retains his dwelling, livestock for purely domestic use, household goods, and a little land for a garden; but the rest of the land, buildings, machines, tools, and livestock are used collectively. These collective units do not, as a rule, own many large agricultural implements, such as tractors or combines, but receive the services of such equipment from machine-tractor stations, of which there were some 6350 scattered over the country at the beginning of World War II.⁶

The collective farmers work in common, performing planned and assigned tasks under group leaders. Their incomes depend upon a number of factors. The volume of produce raised varies significantly from one year to another. In many cases, a portion of the crop must be set aside as food or fodder. A given amount of produce per unit of land must be sold to the government at a low fixed price, and other amounts must go

⁴ A. R. Williams, *The Soviets*, New York, Harcourt, Brace and Company, Inc., 1937, p. 173.

⁵ M. T. Florinsky, *Toward an Understanding of the U.S.S.R.*, New York, The Macmillan Company, 1939, p. 199.

⁶ *Communism in Action*, p. 73.

to pay interest or principal on loans which the farm has received from the government, and rent for the use of farm machinery furnished by the machine-tractor stations. The rest of the crop may be sold to an appropriate governmental agency, or on the relatively free markets for farm produce which exist in the cities; the money received, after deductions for administrative expenses or farm improvements, is divided among the collective farmers. Or the net crop may be divided among the collective farmers, to be used by them or sold for money along with whatever produce they may have raised on their own little plots of land. The work of the farmers is divided into seven categories, with the lowest getting one-half labor day's credit, and the highest two labor days' credit, for each day's work. Each collective farmer gets a share of his farm's cash income, or net produce, on the basis of the number of days worked and the category into which his type of labor falls.

Since the government does not operate the collective farms, it is necessary to employ devices to insure that the collective farmers will raise the desired types of products in appropriate quantities, for otherwise the plan for the whole economy might be seriously disrupted. Such devices lie ready to hand in the Russian system. Collective farmers are induced to raise the planned crops by being granted low taxes, low interest rates or outright grants of funds, low charges for machine-tractor service, and high prices for the portion of crops that is available for sale. Collective farmers who raise the "wrong" crops may be penalized by high taxes; high interest rates, repayable loans, or even denials of credit; high charges for machine-tractor service, or even an artificial "shortage" of such service; and low prices for the remainders of their crops. Thus, the operations of the collective farmers are controlled by working on the economic motivation of the farmers.

The number and importance of the collective farms have been increasing by leaps and bounds. Under the first Five-Year Plan, their number increased from 33,300 to 211,100, and their cultivated area from 2,517,000 hectares to 94,038,000 hectares, or from 2.2 per cent of the total cultivated area of the country to 70 per cent. In 1945, there were said to be 242,400 collective farms, which included over 90 per cent of the total cultivated area.⁷

Peasant Farms. Finally, some agricultural land is still cultivated by individual peasants. They do not, of course, own the land, but they support themselves by working it and selling their surplus products. Like the collective farmers, they must sell a certain percentage of their output to the government at low fixed prices (as a tax), and in general they are treated somewhat more harshly in this respect than the collective farmers, in order to discourage the individual type of farming. In 1928, individual peasants operated almost all of the cultivated area of Russia, but there are now only a million or so individual peasant holdings, averaging about

⁷ *Ibid.*, p. 73.

two acres in size and including altogether less than one per cent of the total cultivated area.⁷

THE DISTRIBUTION OF INCOME

Land and Capital. Since land in the U.S.S.R. is owned by society as a whole, private individuals do not receive rent. Land is apportioned among industries in accordance with the plans for economic activity. The industries are not charged rent for the use of the land, though certain taxes (such as those imposed upon farmers by requiring them to sell a part of their crops to the government at specified low prices) might be construed as rents. Again, the funds which are available for capital investment are apportioned among the industries by several government banks. Here, too, there is no consideration of the possible earnings of capital in different uses, or of the rates of interest which industries might be willing to pay. The assignment of capital funds (and the interest, if any, that is charged) depends wholly upon plans which have been made in the light of the need for expanding productive facilities in the several industries.

With respect to the volume of new capital, as distinguished from the rationing of existing capital, the situation is a little more complex. In a physical sense, the process of saving and capital formation is carried on collectively. That is, the Planning Commission decides that, in the next five years, say 50 per cent of the national income should take the form of new capital goods instead of new consumers' goods and services. It plans accordingly, and sees to it that the plans are carried out. The cost of saving and capital formation is the same in Russia as elsewhere. That is, the cost of augmenting the supply of producers' goods, or capital, which will make for a more abundant life in the future, is the necessity of accepting for the present a smaller real income in the form of consumers' goods; for, in directing resources into the construction of capital goods, the productive factors available for turning out consumers' goods are diminished for the time being. In capitalistic countries, the relative amounts of capital formation and present consumption are determined by individuals, influenced by interest rates and the prices of consumers' goods, while in Russia the decision is made by the Planning Commission without any necessary regard for the desires of consumers. If the government goes in so extensively for capital construction that immediate income in the form of consumers' goods is unduly diminished, the people have to adjust themselves to the situation.

In regulating saving and capital formation, the Planning Commission may adopt either of two plans. The first is to see to it that, in a given year, the people receive money incomes just large enough to take the available consumers' goods and services off the market. The second plan is to give the people of the country a total money income roughly equal

to the value of the entire national real income, and then recapture sufficient of the money income so that what remains just buys the available consumers' goods and services. Strangely enough, the second method is used in Russia.

The measures used to recapture a part of the money incomes are various. Attempts are made to induce the citizens to save, and to invest their savings in government bonds or savings accounts. The products of some industries are sold at prices somewhat higher than planned costs, so that planned profits are made. A turnover tax, similar to a sales tax, is collected on many products. The rate of this tax is as high as 90 per cent on individual products, and in some periods has amounted altogether to some 60 per cent of the total receipts from retail trade.⁸ Other taxes are levied as well, and individuals are required to contribute to funds for social security and other purposes. In the end, the consumers are presumably left with enough money income to buy the available consumers' goods and services, but no more.

The Apportionment of Labor. Since rent and profits do not accrue to individuals in Russia, and since the amount of interest received by private individuals is negligible, it follows that the national income available for consumption is distributed in the form of wages. The apportionment of labor among industries and occupations, and the determination of the wages to be paid for different types of labor, have given some trouble to those in authority. Since land and capital are not human agents of production, and have no feelings or home ties, they may safely be assigned in arbitrary fashion to various industries and parts of the country in accordance with the plan. But the case of labor is different. It would be inhumane, and probably uneconomical as well, to assign labor in a purely arbitrary fashion. On the other hand, the workers cannot be depended upon to move spontaneously to the positions in which they are most needed and can be of greatest service to society.

In this dilemma, the government has had recourse, for the most part, to the capitalistic method of rationing the labor supply. High wages or superior rations at government stores have been used to attract workers to industries and posts where more labor is needed, and low wages or inferior rations to get them away from occupations where less labor is required. Because of preferences, habits, and prejudices on the part of the workers, these inducements do not work perfectly in apportioning the labor supply in Russia; but neither do they work perfectly in capitalistic countries. Prior to 1939, the freedom of movement of Russian workers was so extensive that it resulted in high labor turnover and much absenteeism.

Differential Wages. Even the best economic plan is of little use unless it is efficiently carried out. To encourage efficiency, it has been found neces-

⁸ M. T. Florinsky, *Toward an Understanding of the U.S.S.R.*, p. 164.

sary in Russia to reward good work with relatively high wages. Wage differentials have been used, also, in the hope of getting people to accept difficult and responsible positions requiring considerable ability and training. But the distribution of national income according to the productivity of labor is quite a different thing from equal distribution, or distribution on the basis of needs. Moreover, wage differentials based upon productiveness are especially embarrassing to the Communists of Russia, who have held that common labor is as honorable an occupation as any, and is entitled to as high a wage. However, embarrassing or not, it has been necessary to make this concession to capitalistic methods.

But it may be said that wage differences in Russia are small as compared with differences in money income in capitalistic societies. By the end of the first Five-Year Plan, the ratio between the highest and lowest money wages was commonly reported to be about 10 to 1. This ratio was reported to be about 12 to 1 in 1937.⁹ A decree of November, 1937, established a minimum wage of 110 rubles per month for workers in industry and transportation, and a further decree of August, 1938, prohibited salaries above 2000 rubles per month.¹⁰ On this basis, the extent of inequality in incomes for workers of all grades in industry and transportation was about 18 to 1. Inequality over the whole economy was somewhat greater than this, for some workers in other fields undoubtedly received wages which were below the minimum established for workers in industry and transportation. Finally, a more recent estimate has it that the extent of inequality in income distribution in the U.S.S.R., as measured by the highest and lowest wages, is about 20 to 1.¹¹ The differentials in wages in Russia apparently are thus gradually approaching those which exist in capitalistic countries, though the extent of inequality in total income distribution in capitalistic countries is much greater, since individuals there are also allowed to receive rent, interest, and profits as private income.

Critics of the Russian economy sometimes allege that these admitted differences in wages and incomes do not tell the whole story, and that high party and industrial officials draw salaries which are far above the legal maximum. Sometimes, the critics say, these fortunate individuals receive as much as 7000 rubles a month. On the basis of the minimum wage for workers in industry and transportation, this would produce an inequality of about 64 to 1 between the highest and lowest incomes. In any case, money wages do not tell the whole story, for all Russian workers receive some real income directly from the government without charge. If such free services were distributed more unequally than the money wages,

⁹ *The Nation*, November 13, 1937, pp. 523-526.

¹⁰ M. T. Florinsky, *Toward an Understanding of the U.S.S.R.*, p. 168.

¹¹ A. Yugow, *Russia's Economic Front for War and Peace*, New York, Harper & Brothers, 1942, p. 165.

they would make for increasing inequalities in real income, but the chances are that these services do not vary greatly in amount as between individuals. If this is the case, their distribution tends to reduce inequality in terms of real income.

In the past there was another reason why differences in money wages in Russia did not mean corresponding differences in real wages. Under the old system of distributing consumers' goods, a man with a money income ten times as great as that of another might have had a real income only (say) twice as great. For both men were probably allowed to purchase the same quantities of rationed goods *at low prices*, but the one with the larger money income had to spend the balance of it in the open market at prices many times as high as those of rationed commodities. Hence, his advantage in terms of real income was relatively small. Indeed, workers receiving low money wages were sometimes definitely favored in the matter of rationing.

The differences in real wages in Russia have in general been so small in the past that many people questioned that they would result in efficiency or even the voluntary acceptance of the more difficult and responsible positions. This problem of providing incentives under the relatively equal income distribution of a planned economy was discussed in the preceding chapter, and need not be enlarged upon here. At any rate, Russia does not depend entirely upon financial or economic incentives in her control of the labor supply. If worst comes to worst, the government has the power to draft or conscript labor to serve in any and all industries, and severe punishments may be imposed for inefficiency. The members of the Communist party and the Russian Army are also available as an emergency labor force which may be arbitrarily assigned to any type of work anywhere, and the Young Communists are subject to virtually the same regulation. When workers have been placed to the satisfaction of the authorities, there have been devices available to keep them there. These devices have included keeping the workers in arrears in their pay, and issuing ration cards through the factory so that a worker has had to surrender his ration card if he has given up his job.

THE MARKETING OF CONSUMERS' GOODS

For several years, the process of getting economic goods into the hands of final consumers was very complicated in Soviet Russia. At the beginning of the first Five-Year Plan, some stores were operated directly by the government, others were run by cooperative associations, and still others by private individuals. The private traders were virtually eliminated by 1933, and the business was about equally divided between cooperative and government stores. Since that time, the government stores have become more and more important, and have taken over all of the business

in the cities. In 1937 the government stores controlled approximately two-thirds of the retail trade.

Rationed and Unrationed Commodities. In the early years of economic planning, there were several types of "closed" stores in the Russian merchandising system. In one type, only the workers in particular enterprises could buy at low prices, on the basis of ration cards. This arrangement provided a means of favoring important groups of workers. In a second type of closed store, all citizens possessing ration cards could purchase definite physical quantities of specified goods. Their prices were higher than those of the stores operated for the benefit of the workers of particular enterprises, but lower than those in the "open" stores in which anyone could buy as much of any available commodity as his purchasing power would permit. Finally, there were special stores (Torgsin and Isnab) at which foreigners traveling or employed in Russia could make purchases.

The use of ration cards did not always indicate extreme scarcity of the rationed goods. It merely meant that these goods were being sold in the closed stores at prices which were very low in view of their limited quantities. The goods could have been distributed just as effectively without rationing, by allowing their prices to rise to any level to which the competitive bids of buyers might force them. But these high prices would have resulted in persons with relatively large money incomes getting all the goods, while less fortunate persons were excluded from the market altogether. By rationing at low prices it was insured that most persons, regardless of the size of their incomes, would be able to buy small amounts of these commodities. The rationing method constituted a severe restriction on consumers' freedom of choice, for ration cards were honored only in terms of the rationed commodities, while the possession of money income, without rationing, would permit the individual to buy whatever he chose. However, this restriction of choice was probably not a serious matter, so long as rationing was confined to the necessities of life.

Changes in Marketing. The rationing of bread and flour ended in 1934, and that of other commodities in 1935. Thereafter, anyone could buy as much goods as he wished in any shop, within the limits of his purchasing power. The retail prices of goods were not uniform throughout the country, but they were the same in all stores within each of several zones or districts. Rationing came to an end as the result of increased production of consumers' goods, the diminution of the need to favor special groups or classes of persons, the superior effectiveness of wage differentials (as compared with differential rations) in distributing the labor supply among industries and places, and the desire to improve the methods of retailing, which did not need to be very well managed so long as people purchased on the basis of rations. The changes, of course, were for the better, though the merchandising system was still under close governmental control. The government ownership and operation of the basic

means of production, combined with considerable freedom of choice on the part of the citizens as to what they will consume, come close to the ideal of a socialistic society.

The Resumption of Rationing. The new unrationed system of retailing was continued only until July, 1941, soon after the beginning of the war with Germany. At that time it became necessary to reintroduce rationing in the case of bread, butter, meat, sugar, shoes, clothing, tobacco, and a number of other goods. Some of the wartime rations, such as those of meat, fish, and macaroni, were considerably more generous than those which prevailed in the earlier rationing period; but others, such as those of sugar and bread, were almost identical with the rations of the earlier period. As in the earlier rationing period, the citizens were divided into several classes for rationing purposes, and considerable differences in rations existed as between these groups. Closed or ration stores, and open or commercial stores, again made their appearance. Prices in the ration stores were well stabilized on the whole, but those in commercial stores went up to almost astronomical heights. Rationing had not yet been abandoned entirely by the end of 1947.

INTERNATIONAL TRADE AND MONEY

The Trade Monopoly. While Russia has many and varied productive resources and is, at least potentially, more nearly self-sufficient than most economies, she has had at times to depend upon foreign countries for supplies of several kinds. Moreover, she has tried to make sure that importing and exporting will be carried on only when her interests require them, for the international trade of the country is carried on as a governmental monopoly. The government has also monopolized international financial operations, conducting them in the past in terms of an artificial monetary unit which was not used domestically. When a quantity of a foreign product is essential to the operation of the plan, the trading monopoly is in a strong position, for it can sell Russian products abroad at almost any prices in order to obtain purchasing power in other countries. It could, for example, sell wheat abroad at a price only half as high as that which the government paid the farmers, and the government would make up the loss incurred in this way by selling other articles in the domestic market at a profit.

However, the trading monopoly has to be careful about dumping goods abroad, lest other countries refuse on this account to trade with Russia; and, of course, it cannot command higher prices in the world market than the exporters of other countries are getting. Any sharp fall in the world price of a good which Russia is exporting means that a larger quantity than usual of the good must be sent from Russia to get a given amount of purchasing power abroad. This means, in turn, taking more goods than

usual away from the Russian consumers. It is quite clear, then, that in Russia the costs of importation lie in the amounts of exports which must be given up in exchange and hence subtracted from domestic consumption.

Control of the Money Supply. The issuance of money in Russia, while theoretically limited by requirements for the maintenance of gold or other reserves, is in reality entirely under the control of the government. Moreover, since the government has maintained a monopoly in international trading and in international financial operations, using an artificial monetary unit, the management of the domestic monetary supply has been freed from the influence of such things as international gold movements, interest rates at home and abroad, the international balance of payments, and fluctuations in foreign exchange rates, which are of importance to capitalistic countries under normal conditions. Nothing that happens in the international field can force Russia into inflation or deflation at home, or cause her to expand or contract her currency and credit.

It appears, then, that the monetary problem is primarily one of adjusting the supply of money to domestic needs. That is, the government must be sure that the citizens receive enough purchasing power to enable them to remove from the market the available quantities of goods at the prices at which these goods are offered. However, the overissue of currency would matter relatively little. Since the government controls prices rigidly, the issuance of excessive amounts of currency could not raise prices, but instead would only increase the unspent surpluses in the pockets of consumers. The use of money involves the use of money prices and, as we have seen, the Russian economy is quite experienced in pricing goods in terms of money. However, it will be recalled that price movements are not so influential in Russia as elsewhere. In distributing consumers' goods among the citizens and in apportioning the supply of labor among industries and occupations, price movements operate to some extent in Russia as in other countries. But they have little, if any, influence on the distribution of land and capital among industries, on the total volume of saving and investment, and on the determination of the kinds and quantities of economic goods to be produced.

ACCOMPLISHMENTS OF RUSSIAN ECONOMIC PLANNING PRIOR TO 1941

General Results. The Soviet planned economy, at the beginning of Russia's war with Germany, was still too young to permit observers to reach any complete or final appraisal of its accomplishments and failures, but certain tentative observations may be made on the basis of the only available type of information—the official statistics published by the Soviet government itself. The fact that Russia was able to keep a planned economy functioning might almost be listed as an accomplishment, since

many people doubted the possibility of such an achievement before the Russian experiment actually began. However, official statistics indicate not only continued operation but rapid progress in many respects. For example, the Russian national income, which had amounted to some 21 billion rubles in 1913, and to 25 billion in 1928, increased to over 45 billion in 1932 (after the first Five-Year Plan), to 96 billion in 1937 (after the second Five-Year Plan), and to 125.5 billion in 1940. The third Five-Year Plan called for a further increase to approximately 173 billion rubles by 1942.¹²

Another accomplishment is found in the extremely rapid industrialization of Russia under the planned economy. The capital investment in industry amounted to 52½ billion rubles under the first Five-Year Plan, and to 115 billion under the second Five-Year Plan. It was expected to reach 180 billion rubles under the third Five-Year Plan, and had reached 108 billion by the end of 1940.¹³ The number of workers in large-scale industry increased from 3,100,000 in 1913 (and 1928) to 6.4 millions in 1932, and 7.7 millions in 1936. It was expected to reach 9.3 millions by 1942.¹⁴ The total number of workers in state enterprises was 27 millions in 1937 and 30.4 millions in 1940, which may be compared with the total of 11.4 million wage earners in 1913.¹⁵ Russian industrial production was 3.8 per cent of world industrial production in 1929, but 11.0 per cent in 1932, and 15.2 per cent in 1936. It was expected to reach 32.0 per cent in 1942.¹⁶ The average wage per industrial worker was 870 rubles a year in 1928, 1478 rubles in 1942, 3447 rubles in 1937, and 4069 rubles in 1940. The planned average wage for 1942 was 4722 rubles.¹⁷

Rapid progress was also made in the socialization or collectivization of the Russian economy. In 1928, almost all of the agricultural resources of the country were still in private hands, but by 1937, 98.6 per cent of all agricultural production was carried on by state or collective farms. By 1937, 98.7 per cent of all the non-human means of production in the system had been brought into socialized ownership, 99.8 per cent of

¹² H. Johnson, *The Soviet Power*, New York, International Publishers, 1940, p. 194, and N. Vosnesensky, *Economic Results of the U.S.S.R. in 1940 and the Plan of National Economic Development for 1941*, Moscow, Foreign Language Publishing House, 1941, p. 10.

¹³ M. T. Florinsky, *Toward an Understanding of the U.S.S.R.*, p. 164; and N. Vosnesensky, *Economic Results of the U.S.S.R. in 1940 and the Plan of National Economic Development for 1941*, p. 9.

¹⁴ *Results of the Second Five-Year Plan and the Project of the Third Five-Year Plan*, p. 5; and H. Johnson, *The Soviet Power*, pp. 347-349.

¹⁵ N. Vosnesensky, *Economic Results of the U.S.S.R. in 1940 and the Plan of National Economic Development for 1941*, p. 32.

¹⁶ H. Johnson, *The Soviet Power*, pp. 92, 93.

¹⁷ *Handbook of the Soviet Union*, New York, The American-Russian Chamber of Commerce, 1936, pp. 69, 70; H. Johnson, *The Soviet Power*, pp. 69, 347-349; and N. Vosnesensky, *Economic Results of the U.S.S.R. in 1940 and the Plan of National Economic Development for 1941*, pp. 10, 32.

TABLE 56. PRODUCTION OF IMPORTANT INDUSTRIAL AND AGRICULTURAL COMMODITIES IN SOVIET RUSSIA IN SELECTED YEARS IN COMPARISON WITH PLANNED ESTIMATES

(Source: *Results of the Second Five-Year Plan and the Project of the Third Five-Year Plan*, pp. 5, 13; and several minor sources)

Item	Units	1913	1928	1932 (actual)	1932 (planned)	1937 (actual)	1937 (planned)	1940 (actual)	1942 (planned)
1. Locomotives.....	Numbers	418	478	828	1600	1581	2800	1600*	2340
2. Goods trucks.....	Thousands	14.8	10.6	20.2	12.6	66.1	118.4	51.0	120.0
3. Motor cars.....	Thousands	0.1	0.7	23.9	105.0	200.0	200.0	194.9*	400.0
4. Tractors.....	Thousands	....	1.2	50.6	55.0	80.3	88.5	....	....
5. Electric power.....	Billions of K. W.	1.9	5.0	13.5	22.0	36.4	38.0	48.2	75.0
6. Oil.....	Million tons	9.2	11.7	22.3	21.7	30.5	46.8	34.2	54.0
7. Coal.....	Million tons	29.1	35.5	64.7	75.0	127.9	152.5	164.7	243.0
8. Pig iron.....	Million tons	4.2	3.3	6.2	10.0	14.5	16.0	14.9	22.0
9. Steel.....	Million tons	4.2	4.3	5.9	10.4	17.7	17.0	18.4	27.5
10. Rolled steel.....	Million tons	3.6	3.4	4.3	8.0	13.0	13.0	13.0	21.0
11. Sulphuric acid.....	Million tons	157	211	552	1450	1666	2080	....	....
12. Cement.....	Million tons	1.5	1.8	3.5	6.4	5.5	7.5	5.3	11.0
13. Sawn lumber and timber.....	Million cubic meters	11.9	13.6	24.4	42.5	33.8	43.0	....	45.0
14. Paper.....	Thousand tons	205	284	479	900	832	1000	....	1500
15. Cotton textiles.....	Million meters	2227	2742	2417	4700	3447	5100	3800	4900
16. Woolen textiles.....	Million meters	95	93.2	88.7	270.0	108.3	220.0	123.0*	177.0
17. Leather shoes.....	Million pairs	8.3	29.6	84.7	84.0	164.2	180.0	148.3*	258.0
18. Raw sugar.....	Thousand tons	1290	1283	1403	1400	2421	2500	162.2	3500
19. Grains.....	Million metric quintals	816	733.2	698.7	1057.8	1202.9	1048.0	1190.0	1300.0
20. Cotton.....	Million metric quintals	7.4	8.2	12.7	19.1	25.8	21.2	25.2	32.9
21. Flax.....	Million metric quintals	3.3	3.2	5.0	6.2	5.7	8.0	6.7	8.5
22. Sugar beets.....	Million metric quintals	109.0	101.4	65.6	195.5	218.6	276.0	222.0	282.0
23. Horses.....	Million head on hand	35.8	33.5	19.6	36.9	16.7	21.8	....	21.9
24. Large-horned cattle.....	Million head on hand	60.6	70.5	40.7	80.9	57.0	65.5	....	79.8
25. Sheep and goats.....	Million head on hand	121.2	146.7	52.1	160.9	81.3	96.0	....	170.7
26. Pigs.....	Million head on hand	20.9	26.0	11.6	34.8	22.8	43.4	....	45.6

* 1939 production.

industrial production was in the hands of state enterprises, and virtually 100 per cent of the internal commerce of the country was carried on by state or collective enterprises.¹⁸

Results in Terms of Specific Commodities. In Table 56 we present statistics of the production of several important industrial and agricultural commodities in Soviet Russia in the years 1913, 1928, 1932, 1937, and 1940, together with the planned estimates of production for 1932, 1937, and 1942. It may be noted that the production of most of these commodities had been increased very greatly by 1937, as compared with 1913 and 1928, and that still greater accomplishments were planned for 1942. In some cases, production had exceeded the planned estimates, in others it had fallen a little short, and in still others it had missed the estimates by a wide margin. On the whole, however, the only reasonable comment on these statistics seems to be that they are remarkable, if accurate.

The Elimination of Depressions. Supporters of the Soviet régime are fond of referring to the U.S.S.R. as "the land without depressions," and in general its claim to this title seems to have some justification—although some critics are so unkind as to say that the apparent absence of cyclical fluctuations in Russia indicates merely that the country is in a state of perpetual depression. But whatever the level of economic activity may have been in Russia, it seems clear that this activity has not thus far been characterized by any of the business breakdowns which occur at frequent intervals in capitalistic countries.

This does not mean that instability of economic activity is impossible in Russia, and that business depressions or breakdowns could not occur there under any circumstances. It does mean, however, that if the Soviet system is well managed and if the desire to eliminate business depressions is sufficiently strong, Russia is in an advantageous position for maintaining economic stability. She is in a position, as we have seen, to avoid many of the types of waste which ordinarily characterize capitalistic states. Production is planned and controlled by society as a whole through governmental agencies and is not dependent, as in capitalistic countries, upon the decisions of thousands of independent and uncoordinated individuals. As a result, misdirected production should be less likely to occur in Russia than elsewhere. Of course, the planning authorities have to plan production for future markets, and it is likely that mistakes will be made in estimating consumers' needs or demands. However, since they are in a position to control prices as well as other economic matters, it will be possible to prevent such mistakes from clogging the markets with unsalable commodities, especially since it is not necessary in Russia for any particular commodities to sell at profitable or cost-covering prices.

Finally, the conflict between individual and social interests has been minimized in Russia. Economic activity is carried on in the interests of

¹⁸ M. T. Florinsky, *Toward an Understanding of the U.S.S.R.*, p. 173.

society as a whole, and its object is to produce goods in abundance rather than at a profit. In other words, there are no private enterprisers in Russian industry whose doubts and fears might at times lead them to restrict production, throw laborers out of work, and cut down their purchases of materials and supplies, because of a current or prospective lapse of profits. It is to the interests of Russians as producers to keep the wheels of industry turning just so long as it is to the interests of Russians as consumers to have the goods that are thus made available.

The Employment of Labor. Russia also likes to be known as "the land without unemployment." Indeed, the national constitution now promises every person a job. In the past, some Russians have been excluded from employment in socialized industries because of their connection with the old régime, but this policy has been discontinued. Certainly, Russia has had but little unemployment in the past. However, it must be noted that there is nothing about the Soviet system which inevitably rules out unemployment. But it seems probable that the planning authorities can prevent unemployment if they devote themselves to the task with wisdom and determination.

In capitalistic societies, laborers are put to work by the business enterprisers, who control the land and capital, only if it appears likely that profits can be made in this way. In the U.S.S.R., laborers work for the government—that is, for society as a whole—and it is profitable for society to put people to work just so long as human wants remain unsatisfied. In Russia, the question of profit from the employment of labor does not arise in the usual sense. The cost of putting additional laborers to work consists of turning over to these workers certain productive resources which could otherwise be used by laborers already at work. In other words, the cost of employing more labor is the necessity for those already at work to get along at least temporarily with smaller real incomes. But this reduction in real incomes for those previously employed will be merely temporary, unless the population of the country should become too large in comparison with the land and capital at its disposal. And even in this event, it would be both possible and desirable to keep at work all who are capable of contributing to production.

Workers' Gains. In addition to providing steady work for her people, Russia claimed to have benefited the workers in other important respects. The standard working day was seven hours in ordinary occupations, and six hours in dangerous trades and for all workers sixteen to eighteen years of age. The workers had every sixth day off. No employment of workers under sixteen years of age was permitted, except for training. The workers enjoyed a full social security program (except that unemployment insurance was not needed or included), and received annual vacations of two weeks to a month with full pay. Most Russian workers in the socialized economy were members of labor unions of the industrial type, and enjoyed

wages, hours, and working conditions which were arrived at by so-called collective bargaining. Most workers were on a piecework wage basis, with bonuses for quantity and quality, and assurance that piece rates would not be cut as the workers' earnings rose.

While some of these advantageous conditions had to be changed for the worse under the stress of emergency conditions arising out of measures for war and national defense, there is little doubt that, considering the limitations of their economic system, the Russian workers were well off just before the war began. This did not mean, of course, that their real incomes and scales of living were as high as those of American workers in similar positions. For a small per capita national income, such as Russia's, was certain to result in low real wages and scales of living, no matter how fairly and equitably that income was divided among the citizens, or how favorable the working conditions that were provided.

CRITICISMS OF RUSSIAN ECONOMIC PLANNING PRIOR TO 1941

Russian Statistics. We have no thought of suggesting that no problems remained unsolved in the U.S.S.R. as of 1941. Actually, the results of the Russian planned economy could be criticized in many ways. In the first place, there was the question of the reliability of the statistics on production, income, wages and other matters. Almost the only source of data was the Russian government itself (or various agencies of the government), and this was clearly a biased source. The Russian government, operating a planned economy in the midst of a skeptical world, was doubtless anxious to have its economic affairs appear in a favorable light, and there was a possibility that this government, like other governments, might touch up its statistics at times. Moreover, there was no way to check these statistics adequately, and thus to measure and correct any inaccuracies that might exist.

The Russian government and its agencies sometimes gave statistics in terms of "current rubles" and again in terms of "rubles of 1926-27 value." Data presented by different governmental agencies, covering exactly the same economic activities, often varied widely, and attempts were seldom made by these agencies to account for the discrepancies. However, it may be said for Russian statistics that they show both the successes and failures of planned operation, and that they would still indicate a remarkable degree of economic progress over a limited period of time, even if they had to be discounted by a very sizable fraction.

The Rapidity of Industrialization. Some critics, while conceding that rapid economic progress has been made in the U.S.S.R., were inclined to discount this progress because of the low level of economic activity from which the planned economy started. It is obviously much easier to

double a small national income than a large one. An absolute increase which would double the number of industrial workers employed in Russia might cause only a 10 per cent rise in the number employed in this country. It has been suggested that economic progress in Russia under planning proceeded but little, if any, faster than American economic progress in the early days of this country, if allowance is made for differences in the conditions under which the progress occurred. According to this analysis, economic activity in Russia will expand much more slowly in the future than in the past. As evidence on this point, the critics call attention to the fact that the third Five-Year Plan called for an increase in industrial output of only 92 per cent, as compared with 136 per cent for the first Five-Year Plan and 114 per cent for the second.

Opposed to these critics were others who claimed that the process of industrialization had been too rapid, so that waste and inefficiency resulted. They insisted that a more gradual process of industrialization would have produced much better results. The Russian planners have been greatly interested in large-scale enterprises and this interest is said to have interfered to some extent with rapid industrialization. For example, in setting up an electric heat-and-power station in Moscow, the plans called for a giant station with a capacity of 200,000 kilowatts. Construction was started in 1932, but the plant was still unfinished at the end of the second Five-Year Plan in 1937. If the Plan had called for 8 or 10 stations of 20,000 or 25,000 kilowatts each, some of the stations at least could have been in operation by 1937. It should be noted that there is now apparent in Russia a desire to set up plants of "optimum" size rather than those that are noteworthy chiefly by reason of their huge dimensions.

Industrial Production. The great increases in the output of manufactured goods through 1940 resulted, in large part, from the fact that the managers of Russian industrial enterprises concentrated attention on plan fulfillment in terms of physical quantities of goods, to the neglect of other aspects of the plans. Statistics on the output of physical quantities of goods tell us nothing about the quality of the goods; and outside critics and the Russian leaders themselves agree in complaining bitterly about the wretched quality of many Russian manufactured goods. Again, statistics on physical output do not give us any information as to labor efficiency and productivity or costs of production. By common consent of the outside critics and the Russian leaders, labor efficiency and productivity have never increased so rapidly as was planned, and have remained far short of the levels achieved in other countries. Increased physical output of goods in Russia has resulted largely from the use of increased physical quantities of the productive agents.

Statistics on the physical output of goods do not show what has happened to plant, machinery, and equipment in achieving the stated results. Obviously, an increase in the quantity of physical commodities must be

discounted to some extent if it has been obtained at the cost of an abnormal increase in the wearing-out and breaking-down of machinery and equipment; and this is true, also, of increases in the production of new capital goods if adequate provision has not been made for the maintenance and repair of old productive facilities. Many reports, including some from official Russian circles, indicate that the Soviet planners and industrial officials have been very lax with regard to such matters. The Russian industrial system has apparently suffered from a severe shortage of good managers, and the planners have had a difficult time trying to find a substitute for good management which would lead to business efficiency comparable to that furnished under capitalism by the competition of private interests.

While increases in the physical output of manufactured commodities were common, we should note that nothing like a steady or uniform rate of increase was maintained as between the various fields of industrial production prior to 1941. In this situation, any statement about an average percentage of plan fulfillment in industrial production is almost meaningless. If the industry producing automobile bodies fulfills its plan to the extent of 150 per cent, while the automobile tire and tube industry fulfills its plan to the extent of only 50 per cent, it seems rather silly to average these figures and announce that in these two branches of industry the plan fulfillment averaged 100 per cent. All these considerations undoubtedly qualify, though they do not cancel, the accomplishments and progress which were reported in the field of industrial production.

Agricultural Organization and Production. We have seen some of the difficulties which attended the operation of state farms, and may now note that the much more important collective farms also came in for a share of criticism in the period under discussion. They are said to have been so closely controlled by the government and representatives of the Communist party that they were cooperative in name only. The administration of the farms was often high-handed and arbitrary in its treatment of the individual collective farmers. A fairly large part of the output of the collective farms actually came from the individual homesteads or plots of land which the individual collective farmers were allowed to cultivate for themselves. Indeed, the managers of the collective farms, in despair over the prospect of increasing truly collective production, are said to have illegally turned over large quantities of collective land to the individual farm members for private cultivation in the hope, in this way, of fulfilling the plans for agriculture.

The distribution of income on the basis of "labor days" on the collective farms was complicated, cumbersome, and difficult to apply in agriculture. Moreover, the labor days credited to individual collective farmers too often depended more on the good or ill will of the farm officials than on individual productivity. In some cases too much of the income of col-

lective farms was devoted to the construction of community buildings, to administrative expenditures, and to actual production expenses, and too little was divided among the individual farmers. In this difficult situation with regard to positive incentives, the Russian leaders had to depend on negative incentives; and severe penalties were imposed for laxity, refusal to work, crimes (especially theft) against socialist property, and "counter-revolutionary" activities.

The production of leading farm crops in Russia lagged badly under the first Five-Year Plan, but showed considerable general improvement under the second Plan and, in some cases, under the third. However, these improvements must be discounted to some extent because of the adoption of the practice of measuring the crops in terms of biological yield (the amount of crops in the field less a fixed deduction for loss in harvesting) rather than actual yield, and because the increased yields could be accounted for largely in terms of increases in the quantity of land under cultivation rather than in terms of increased yield per unit of land. The results obtained in livestock production were particularly unsatisfactory. Some progress was made from the low point reached at the end of the first Five-Year Plan, but the goals of the third Plan were still below those of the first for two important divisions of livestock.

The Distribution of Income. According to almost every estimate that has been made, inequality in the distribution of income in Russia has been small in comparison with that which exists in leading capitalistic countries. However, many critics contend that the differences in income in Russia have been (1) much greater than the Russian leaders are willing to admit and (2) much too great to be consistent with the ideals of modern socialism. It is also held that the commodities and services distributed by the government without charge were divided up in such a way as to increase rather than diminish the inequality which is based on the size of money incomes. That is to say, the persons who drew the largest salaries are said to have been granted, also, the free use of magnificent houses or apartments, country estates, rest homes and sanatoria, expensive limousines, superior educational facilities for their children, and other advantages to which the ordinary citizens had little or no access.

The distribution of income in Russia has been criticized both for having too little inequality, and for having too much. According to most observers, the major weaknesses of the Russian planned economy have included, among other things, low efficiency and productivity on the part of labor of all grades, including management, and the failure to develop loyalty, disinterestedness, and devotion to duty as rapidly as had been expected. These are exactly the shortcomings we should expect to find if the Russian combination of economic rewards and other motivating factors were inadequate to provide incentives for all the people.

In the period under discussion, however, these difficulties could be

attributed in part at least to other factors. Because of the speed with which the Russian economy had been industrialized and mechanized, the Russian labor force in industry and some other fields had grown very rapidly, and there had never been a time when this labor force as a whole could be considered properly trained and experienced. Russian workers found it difficult to adjust themselves quickly to the strict regimen of urban industrial life, and they were inclined at times to be late for work, to miss work altogether if they wished to stay away on a given day, to "take it easy" on the job, to disregard safety rules, and to be careless in the use of materials and equipment. Conscious of a general shortage of labor in industry and certain that they could get a job almost anywhere, the workers were disposed to change jobs frequently and to move from one place to another in search of more favorable opportunities. The low productivity of other grades of labor was also due in part to the inefficiency of management. All or most of these difficulties may conceivably disappear when the Russian planned economy has been operating for a longer time. If they do not, and if labor efficiency and productivity remain low after (let us say) a generation or more of experience with modern industrialism, there will be strong reason to doubt the effectiveness of the Russian system of incentives.

Labor Conditions. It is necessary to discount considerably the conclusion reached by supporters of the system that Russia was a kind of workers' paradise in the period under discussion. Russian workers of ordinary grades were perhaps fortunate in living in an economic system in which virtually all the income available for consumption was distributed in the form of wages, and in which differences between individuals with respect to money income were relatively small. However, we must remember that real wages depend upon both the total productivity of the economic system and the way the total income is divided among the people. If the national income as a whole is too small, it could be divided with absolute fairness, or with complete equality, without producing a high level of economic welfare for individual members of the society in question.

While grave difficulties are involved in estimating the exact income status of the Russian workers prior to 1941, the consensus seems to be that their real incomes and standards of living, although gradually improving, remained low in comparison with those of the workers of many other countries. For example, if we value the ruble at the nominal rate of five to the dollar, the entire Russian national income of 125.5 billion rubles in 1940 amounted to a little over 25 billion dollars for some 193,000,000 people, or about \$130 per capita. And the evaluation of the ruble at five to the dollar is said to be a gross exaggeration of its purchasing power in Russia.

The wage rate structure, hours of work, and other working conditions of Russian labor, as provided by basic laws and decrees, appear to have

been relatively satisfactory. However, critics of the Russian system contend that all these things were meaningless except as a device for deceiving outside observers of the Soviet system. The managers of Russian enterprises were under great pressure to fulfill the plans for production, and were subject to severe punishment if they failed to do so. As the lesser of two evils, they sometimes openly violated the conditions of the Labor Code and of collective agreements based on it. Other undesirable results came from the attempt to use the piecework basis of wage payment for various types of work which, in other countries, would not be considered well suited for this system.

Harassed by problems of labor turnover, absenteeism, and tardiness, the Russian leaders imposed severe regulations calculated to bind the workers to their jobs, get them to work on time, and keep them coming to work every day. While most Russian workers were members of labor unions, the critics allege that the supposed functions of these unions were merely another case of window-dressing. The unions are said to have been completely unable to protect the workers against summary dismissal, eviction, or imprisonment; against violations of the wages, hours, and working conditions provided by law; or against the violation of safety codes and other protective measures. The cooperation of unions with management, it is charged, meant merely that the unions functioned as slave-drivers, employment bureaus, and collectors of forced loans. The unions represented the ruling bureaucracy and not the workers. According to this opinion, real labor unions did not exist in Russia any more than in Nazi Germany.

The Issue of Freedom. Finally, with regard to the question of freedom for the individual, it is difficult to condemn the pre-1941 Russian system too strongly. In spite of the democratic façade which the constitution provided, the government of Soviet Russia was a dictatorship of the most absolute and complete type, with the few leaders of the Communist party in full control. This dictatorship was the complete antithesis of the political democracy which modern collectivists expect to find in their ideal system. Moreover, the situation in the strictly economic field was not much better. The individual citizens of Russia were, by the nature of the system, deprived of many of the economic rights which people enjoy under capitalistic institutions. The numerous and severe restrictions imposed on the workers indicated that these Russians had very little of the freedom of occupational choice that is supposed to be a feature of socialism. They had more freedom in spending their money incomes, but even here their choice of goods was much more restricted than it would be under ideal socialism. On the whole, it was this lack of political and economic freedom which has caused so many people to wonder whether the Russian system should be described as socialistic, and whether comprehensive economic planning and democracy may not be incompatible.

SOVIET RUSSIA IN WORLD WAR II

Early Economic Losses. After the beginning of the war with Germany, the Russians gave ground rather rapidly before the invaders. From June, 1941, to the end of 1942, the part of Russia conquered by Germany was as large as the eastern and southern portions of the United States, including Texas. The area contained half of Russia's working coal mines and 37 per cent of her railroad mileage. It had formerly produced 45 per cent of Russia's wheat, 41 per cent of the rye, 90 per cent of the sugar beets, two-thirds of the iron ore, 60 per cent of the pig iron, half of the steel, 25 per cent of the machines, and half of the electric power.¹⁹ Many people outside of Russia felt sure that these losses would soon prove crippling.

Production Successes. But in spite of the losses just listed, Russia's war production on the whole was not only maintained but increased. The secret of this success was the rapid development of the Ural and Siberian regions. The machines and equipment of whole factories were "leapfrogged" from western Russia to these new regions. In preparation for such a development, machines had been lightly anchored in place and numbered for reassembling. They were loaded on cars, sometimes several thousand cars to a factory, and moved hundreds or thousands of miles. In the new regions far to the east, sites had been cleared in readiness or were rapidly cleared. Some factory buildings had already been constructed and others were soon erected. Sometimes large numbers of workers were moved, along with the machinery and equipment, and were housed in hastily constructed barracks.²⁰

The Russians had large stock piles of some essential materials, and were also able to rely on local materials in the new regions to a considerable extent. The Ural region, for example, contains all but four of the known chemical elements.²¹ Reliance was also placed on intensification of the workers' efforts, curtailed replacements of machinery in non-essential fields of production, standardization of products, improvisation, and training on the job. Women and young people of both sexes were brought into employment, given rapid training, and stimulated by honors and socialist competition. Housewives were changed into factory workers in two weeks' time. Technical training programs were rapidly extended and eventually included about half of all students beyond the seventh grade.

In agriculture, war losses of acreage were rapidly replaced as some $3\frac{3}{4}$ million acres were brought into use in Siberia, $2\frac{1}{2}$ million acres of victory gardens were cultivated by 10 million people, another $2\frac{1}{2}$ million acres were cultivated through factory auxiliary-farms, and some 20 million

¹⁹ E. Snow, *People on Our Side*, pp. 69, 70; and M. Dobb, *Soviet Planning and Labor in Peace and War*, New York, International Publishers, 1943, pp. 101, 102.

²⁰ *Ibid.*, pp. 102-107.

²¹ E. Snow, *People on Our Side*, p. 147.

acres were brought into use by collective and state farms which had not been overrun by the invaders. Working days per individual on the collective farms were stepped up sharply. By 1943, some 70 per cent of all agricultural workers were women, and a million more women were in training to handle heavy machinery.²²

In comparison with what most people expected, Russian war production was truly prodigious. Indeed, Russia conducted the war against Germany almost entirely on her own power in 1941 and 1942. From the beginning of the war through the siege of Stalingrad, Russia received only about a billion dollars' worth of aid from the United States and Britain, and such an amount of munitions and supplies did not go far in World War II. On the other hand, Russia required large amounts of material assistance from her Allies in order to drive the enemy out of the country and back to the heart of Germany.

The Problem of Rehabilitation. Under the circumstances prevailing at the time, it was not surprising that Russia failed to adopt a new Five-Year Plan in 1943, but instead embarked on a course of rehabilitating the devastated areas of the country as fast as they were reconquered. Some 1710 towns and cities, 70,000 villages, and 6 million buildings had been partly or completely destroyed, and 25 million people had been made homeless. About 32,000 industrial plants and 98,000 collective farms had been ruined. The total damage was estimated at 679 billion rubles at 1941 prices.²³ Accordingly the Russians set out to build or rebuild several million square meters of dwelling space, and thousands of factories, schools, and hospitals. Millions of cattle, sheep, goats, and horses were returned to the west, thousands of tons of seed were made available for reconquered areas, thousands of tractors were brought back from the east, hundreds of machine-tractor stations and tractor repair shops were rebuilt, thousands of agricultural leaders and specialists were brought back, railroad lines were restored, and railroad stations were rebuilt.²⁴

THE FOURTH FIVE-YEAR PLAN

Details of the Plan. By April, 1946, about a year after the end of the war with Germany, Russia was ready to embark on a fourth Five-Year Plan, even though the work of rehabilitation was only moderately well under way. The new plan seems about as ambitious as its predecessors. By 1950, the gross product of industry is to be increased to 205 billion rubles (as compared with 137.5 billions in 1940), and the production of food and other consumers' goods is to increase by 17 per cent a year over

²² *Ibid.*, pp. 103-110.

²³ *International Labor Review*, January-February, 1946, p. 71.

²⁴ *Ibid.*, p. 72; and *The U.S.S.R. in Reconstruction*, New York, American-Russian Institute, 1944, p. 43.

the period. Agricultural production in 1950 is to be 27 per cent above that of 1940. New capital investments are to amount to 157.5 billion rubles over the five years, and new agricultural machinery valued at $4\frac{1}{2}$ billion rubles is to be supplied. National income will increase, according to the Plan, to 177 billion rubles in 1950, as compared with 125.5 billions in 1940.

Employment in the national economy (government owned and operated) in 1950 is to reach 33.5 million workers, an increase of 6.25 millions in five years. Wages on the average are to increase to 500 rubles per month. Labor productivity is to increase by 36 per cent over the pre-war level, and 70 per cent of the general growth of industrial production is to depend

TABLE 57. PRODUCTION OF SELECTED COMMODITIES IN SOVIET RUSSIA IN 1940, AND PRODUCTION PLANNED FOR 1950

(Source: *Soviet Russia Today*, May, 1946, p. 33)

Item	Units	Actual Production in 1940	Production Planned for 1950
Petroleum	Million tons	34.2	35.4
Coal	Million tons	164.7	250.0
Electric power	Billion kilowatt-hours	48.2	82.0
Pig iron	Million tons	14.9	19.5
Steel	Million tons	18.4	25.4
Copper	Thousand tons	157.0	251.2
Automobiles	Thousands	194.9	500.0
Locomotives	Thousands	1.6	3.8
Grains	Million metric quintals	1190.0	1273.3
Raw cotton	Million metric quintals	25.2	31.5
Flax	Million metric quintals	6.7	9.3
Sugar beets	Million metric quintals	222.0	270.8
Cattle (on collective farms)	Million head on hand	20.1	25.9
Sheep and goats (on collective farms)	Million head on hand	42.0	68.1
Pigs (on collective farms)	Million head on hand	8.2	11.1

on this factor. Expenditures on education and culture will increase to 106 billion rubles over the period, or $2\frac{1}{4}$ times the pre-war expenditures; technical schools will be expanded to accommodate 1.2 million students; and some 42.3 billion rubles will be spent for the construction of 72.4 million square meters of new housing (as compared with 15.5 billion rubles and 30 million square meters under the third Plan). Small hydro-electric stations with an aggregate capacity of one million kilowatts will be constructed for rural electrification; over 3 million acres of land will be reclaimed by irrigation or drainage; and over 40 billion rubles will go into the restoration and development of railroad transportation.²⁵

In Table 57 we present the estimates of planned production of a number of important commodities in 1950 in comparison with actual produc-

²⁵ *Soviet Russia Today*, May, 1946, pp. 32, 33, and December, 1946, pp. 9-10.

tion in 1940. It will be noted that some of the goals of the fourth Five-Year Plan are only slightly higher than those reached in 1940, but in most cases very large increases in production are expected. Whether or not these increases can actually be achieved remains to be seen. In the meantime, the Russians are at least entitled to an "E for effort."

CONCLUSION

Returning now to the present, we note that it is difficult to make an appraisal of the Russian system on the basis of the available mass of conflicting evidence and argument. Soviet Russia has shown that it is possible for a planned economy to continue operating, to eliminate some of the types of waste and inefficiency which prevail under capitalism, and to make considerable economic progress. On the other hand, Russia has encountered many serious economic problems in operating her planned economy and has clearly demonstrated that not all types of waste and inefficiency are peculiar to capitalistic systems. The supporters of Soviet Russia attribute these wastes and inefficiencies largely to the extreme youth and inexperience of the Russian planned economy. They expect that these difficulties will gradually disappear, and that the Russian system will steadily improve in efficiency and productivity.

The critics believe that many types of waste and inefficiency are inherent in the nature of the Russian planned economy and will prove as troublesome in the future as in the past. They attribute Russia's past progress under the planned economy largely to two factors: (1) the fact that Russia has been experiencing a tremendous building boom such as various capitalistic economies have had at times, and (2) the fact that the planned economy started with a situation in which the people were short of almost all kinds of commodities and services, so that they would eagerly accept almost any kinds of goods which the planners decided to produce—a situation, in other words, in which almost any planned decisions would seem reasonably correct. They predict, therefore, that Russia in the future will have grave difficulty in maintaining her past rate of progress. While we cannot be sure that either of these opinions is correct, or predict definitely the results which the Russian planned economy will produce in the future, it seems clear that the Russian system, though it furnishes some kind of an alternative to capitalism, is far from being the type of economic system which most Americans would choose in preference to their own system of free enterprise, even though the latter is beset by economic maladjustments for which adequate solutions have not yet been found, or if found have yet to be applied.

1. What is the importance, to students of economics, of examining the operation of the Russian planned economy?
2. Explain the organization of the Communist party, and its importance in Russian political and economic affairs.
3. Outline the governmental organization of the U.S.S.R.
4. Is the government of the U.S.S.R. really as democratic as its constitution suggests? Explain.
5. How are economic activities planned in Russia?
6. Why is it often said that Russia has a "two-way" system of economic planning?
7. Distinguish between the functions of plants, trusts, and administrations in Russian industry.
8. Is the relationship of prices to costs of production a significant one in the Soviet economy? Explain.
9. Are there reasons for expecting that planned production can be adapted to the wants of consumers in Russia? Explain.
10. How does the status of agriculture differ from that of industry in the U.S.S.R? Explain.
11. How do state farms, collective farms, and individual peasant farms differ in organization, operation, and importance?
12. What are the factors which determine the amount of income which a worker on a collective farm will receive in a given year? Explain.
13. As a Russian farm worker, would you prefer to be on a state farm or collective farm? Why?
14. How are existing supplies of land and capital apportioned among the various industries in Russia?
15. How is the total volume of saving and investment, in terms of physical units, controlled in the U.S.S.R.?
16. How are financial results made to match the physical results in connection with the process of saving and capital formation?
17. Why is it true that the cost of obtaining capital goods is the same in Russia as in any other type of economic system?
18. On what basis is the Russian labor supply distributed among occupations and industries?
19. Why are differences in wages permitted among workers in Russia?
20. How great are these wage differences? Explain.
21. Explain the various ways in which consumers' goods have been distributed among consumers in Russia.
22. What progress has the Russian economy made toward its goal of having a single set of merchandising units selling to all purchasers at a single scale of prices?
23. How is international trade handled by Soviet Russia?
24. How does the monetary problem in Russia differ from that faced by the governments of other countries? Explain.
25. Give a general estimate of the results of planned operation in the Russian economy.
26. "The rapid industrialization of the U.S.S.R. may be considered as either an advantage or a disadvantage." Explain.
27. Is Russia "the land without depressions"? Why?

28. Why is it difficult to evaluate the economic accomplishments and failures of the U.S.S.R?
29. Make an appraisal of planned industrial production in Soviet Russia.
30. What are the chief shortcomings of agricultural organization and operation in Soviet Russia?
31. "The distribution of income in Soviet Russia has been criticized both for having too little inequality, and for having too much." Explain.
32. Would you say that the Soviet Russian system is a kind of workers' paradise? Explain.
33. What is the significance of the "issue of freedom" in evaluating the Soviet Russian system?
34. Indicate the economic losses which the U.S.S.R. suffered early in her recent war with Germany.
35. How was Russia able to maintain and even expand war production in spite of the loss of important territory? Explain.
36. Why was no new Five-Year Plan undertaken by Russia between 1942 and 1946?
37. "The fourth Five-Year Plan seems to be as ambitious as any of the others." Explain.

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Fascism

SOCIALISM IS NOT THE ONLY ALTERNATIVE TO CAPITALISM THAT HAS BEEN available in recent years, for a number of countries have been operating under another type of system known as fascism. While the most important fascist systems—those of Germany and Italy—were liquidated by their defeat in World War II, it is still too early to conclude that fascism is dead and buried and can safely be relegated to the history books. Hence we shall examine briefly the nature of fascist governmental and economic systems.

FASCIST GOVERNMENT

The Dictatorship. Using the German and Italian systems as examples of fascism, we may note that the fascists came into power by securing control over the existing forms and agencies of government, rather than by revolution or the violent overthrow of existing governments. Once in power, the fascists went on to eliminate some governmental institutions completely, to purge or “purify” others to suit their purposes, and to permit still others to go on functioning virtually without change. The result was a very strong central government which exercised rigid control over the activities of lesser governmental units and of private individuals. And the powers of the central government were concentrated to an almost unbelievable extent in the hands of one man, the great leader and dictator, and his trusted associates.

In the governments of fascist countries, the executive department of the government was supreme. The dictator himself held the highest executive office in the government, and other key positions as well, and his loyal henchmen held most of the other important positions. As many governmental posts as possible were filled by appointment rather than election, to guard against the possibility that undesirable characters might get into office. Legislatures were retained, but seemed to serve no very useful purpose. They met rarely, did very little legislating since the dictators had the power to make laws by decree, and functioned primarily as sounding boards and cheering sections for party propaganda and declarations of the dictators as to accomplishments and policies. The existing court systems were retained in general, but non-fascist judges were re-

placed by loyal fascists. The courts had no power to restrain the executive department of the government, their functioning being limited to dispensing the fascist version of "justice." The fascists took a very serious view of political crimes, or offenses against the state, the fascist party, or the dictator; set up special courts to give short shrift to persons accused of such offenses; and maintained a powerful and dreaded secret police force, operating at least partly outside the laws and forms of government, to ferret out such persons, round them up, and bring them to justice.

The Fascist Party. The fascist countries, like Soviet Russia, had one-party systems of government. In each country, no political parties or organizations were tolerated except the fascist party, by whatever name it might be called. The fascist party in each case had only a few million members and included only a very small part of the citizens of the country. Except by special permission from above and in highly exceptional cases, the party did not accept new adult members. Instead, it relied upon the development of new members from junior fascist organizations. Both boys and girls were members of youth organizations, which included groups of all ages from 5 to 6 up to 21. Several million budding fascists were to be found in the various youth organizations of each important fascist country.

The requirements for party membership were rather severe, and included blind devotion, loyalty, and obedience to the leader or dictator, and a willingness to devote one's time, labor, and money or other resources to the objectives of the leader and the party. The members of the party were reexamined periodically to see if they were exhibiting the prescribed fascist virtues. If found wanting, they were at least expelled from the party, and were sometimes jailed or even liquidated. Nevertheless, party membership was eagerly sought in the heyday of fascism, for it carried with it both prestige and a variety of economic advantages.

The identification of fascist party and government was virtually complete. The dictator or head of the government was also the leader of the party. His trusted associates were high officials of both party and government. The party had a cabinet which paralleled the cabinet of the government and contained many of the same people. All along the line, governmental officials and agencies were matched by party officials and agencies with considerable overlapping of personnel. As head of the government, the dictator had general charge of appointments to governmental positions, and as head of the party he had similar charge of appointments to positions in the party. Thus, for all practical purposes, the fascist party was the government.

Individual Liberties. In each country, the fascist party regarded democracy as useless and an evidence of weakness on the part of a nation, and found it desirable to suppress practically all rights and liberties of individuals. Freedom of assembly did not exist outside the all-powerful

party. Freedom of speech was a meaningless term, for any criticism of, or outspoken opposition to, acts and policies of the government or fascist party was likely to be interpreted as treason. The press was also controlled entirely by the government and printed only government-approved "news." Education was strictly controlled by the government, in order that the principles of fascism might be inculcated in the youth of the land. In Germany, even religion became largely a function of the ruling party. Religious leaders were displaced by other persons who would be amenable to the wishes of the party and would extoll the virtues of fascism, and it was reported that the Bible had been rewritten to conform to party principles. In Italy, however, the Catholic Church continued to function on the basis of an agreement with the ruling party, although relationships between the church and the government were not particularly cordial.

Under fascism, a man's house was not his castle if we may believe the critics of fascism. A citizen's house was likely to be invaded and his personal possessions destroyed at any time by governmental representatives acting without warrant. He could be arrested without warrant, tried without jury or legal representation, and given an exceedingly severe sentence. The law was whatever the leaders said it was. It could be one thing one day, and quite another the next. A man could be punished, under retroactive laws, for an act which was not a crime or a misdemeanor at the time at which it took place. He could be punished for crimes which it was presumed he would commit in the future, and for offenses which others might conceivably commit against him—this last type of punishment being called "protective arrest." He could be confined without specific charges being lodged against him. He could be arrested and punished merely for stating that a crime had been committed—the name of this offense being "the spreading of atrocity legends." Moreover, the people of the fascist countries were subjected to espionage on the part of the government to an extent which has seldom been equaled.

About the only right which was left to the individual citizens was the right to vote, and this did not amount to much since comparatively few governmental offices were filled by election. However, the ruling party would stage an occasional election of the figurehead legislature or a referendum on the policies which the government had been following over a period of time. On these occasions, great pains were taken to see that the people came out to vote, and that they voted as the leaders desired. The results of the elections or referendums were a foregone conclusion.

The Suppression of Opposition. Opposition to fascism was regarded as a kind of social disease which had to be eradicated as quickly as possible, and the favorite method of eradication was violence. Sluggings, beatings, and other forms of mob violence were common. Large numbers of people were murdered outright. Far larger numbers were thrown into prison, or

into concentration camps similar to the camps maintained for prisoners in time of war. Many people simply vanished completely, leaving no trace. Others allegedly committed suicide because they feared arrest and punishment. In jails and concentration camps, the mortality due to pneumonia and other "natural causes" was extraordinarily high, and many prisoners were reported to have been "shot while trying to escape."

In Germany more than in Italy, the program of suppression had a strong racial tinge. Opposition had to be suppressed for the good of the state, but that was considered synonymous with the good of the race. According to the party program, none but members of the nation could be citizens of the state, and none but those of German (or Aryan) blood could be members of the nation. No Jew, therefore, could be a member of the nation, and much of the fascist program of persecution and terrorism was directed against the Jews. The Germans were said to be psychologically powerless to admit that the loss of World War I and the unfortunate economic conditions which followed were due to any faults of their own. They held that the war was lost because of the treachery and duplicity of the Jews at home, and that the Jews were responsible, also, for the unfavorable economic conditions of the post-war years. Moreover, economic recovery and prosperity were said to wait upon the elimination of the Jews from the population.

According to Jewish refugees from Germany, it is impossible to describe briefly the treatment to which the Jews were subjected under fascism. They were deprived of citizenship and the right to vote. They were cast out of the professions, such as teaching, medicine, journalism, and the law. They could not belong to labor unions, or work in retail and mercantile fields. Their property was confiscated in many cases, and they themselves were subjected to close espionage. The rights of their children to education were curtailed, as was also their right to make a livelihood through the use of land. They suffered personal indignities and physical violence, and severe injury or death was the portion of many. Some of the more fortunate were able to flee the country, but those who remained lived in a constant state of terror and abject misery, if indeed they lived at all.

In Italy the campaign of suppression was directed chiefly against living persons, and especially against those in Italy at the time; but in Germany the works of famous German writers of the past and of citizens of other countries were condemned by the fascists. Such works were banned from circulation, and were burned in monster bonfires staged for this purpose. Objectionable paintings were removed from art galleries, and other works of art destroyed. Even the performance of musical compositions by certain composers was forbidden. The fascists declared that the German nation and race should work out its own art and culture, so that they might be free from alien contamination.

Italy, in the early days of fascism, was not conscious of a "Jewish problem" that needed attention. Later on, however, the assumed necessity for a common front between the fascist nations led the fascist government of Italy to introduce a program of anti-Semitism, even though the Jews in Italy numbered only about 50,000 out of a total population of 43,000,000. It was said that the Italian government experienced great difficulty in arousing enthusiasm for this program since many Italian people had never even seen a Jew.

The Individual and the State. The fascist philosophy required a strong central government to which the individual citizens were subjected and subordinated. Ordinary individuals were considered too ignorant or too thoroughly immersed in the private affairs of life to carry on the affairs of government successfully. This task had to be undertaken by the chosen few, who were found in the fascist party. The subordination of the individual to the state was not for his own good, as in Russia, but for the good of the state. The state was thought of as something more than an aggregate of the individuals who made it up at any particular time. For fascism, society seemed to have historical and immanent ends of preservation, expansion, and improvement quite distinct from those of the individuals who at a given time composed it; so distinct in fact that they might even be in opposition.¹ Individuals were regarded as merely the means by which society might reach its goals, and as but temporary and relatively unimportant elements in the long life of the state.

Moreover, according to the fascist philosophy, the individual cannot exist without the state. Apart from the state, the individual has no more purpose or reason for being than has one body cell isolated from the human body. For the individual to assert his rights against the state would be as ridiculous as for a body cell to rebel against the body as a whole. Thus, the individual has no rights which are superior to those of the state. He has merely a duty toward the state and, in performing this duty, he may be expected to sacrifice everything, even life itself. The interests of the state permeate all activities of the individual, and not merely his political activities. This general theory helps to explain why the rights of individuals, as we are accustomed to view them, were largely suppressed in the fascist countries. The fascist theory of the state was seen in action in the economic policies of fascism, most of which were intended to promote the greater glory of the nation, rather than the welfare of the individual citizens.

FASCIST ECONOMIC ORGANIZATION AND POLICY

Economic Institutions of Fascism. The operation of fascist economic systems involved no change in the nominal character of the economic in-

¹ Julia E. Johnsen, compiler, *Capitalism and Its Alternatives*, New York, H. W. Wilson Company, 1933, p. 376.

stitutions of the countries. The fascist leaders, in other words, professed great admiration and respect for private property, free enterprise, individual initiative, and competition, and proposed to rely on these capitalistic institutions for the operation of the economic system so far as this course of action produced desirable results. However, the goals of the state or nation were to be supreme; and, if the operation of capitalistic institutions tended to produce results which were inconsistent with state objectives, the government would have to step in with appropriate interferences and controls.

The fascist leaders declared repeatedly that they did not intend to set up an economic system like that of Soviet Russia, in which the state owns and operates the basic means of production, and individual initiative is weakened if not destroyed. Indeed, the system was not intended to be permanently even a governmentally controlled system. The government did not propose to direct industry and trade in the long run, but intended merely to open up the way for private industry and trade. In practice, however, as the fascist countries moved into preparation for war and finally war itself, the government found it necessary to direct and control the economic system more and more completely, and its interferences in all types of economic activity multiplied rapidly. In the latter days of fascism, the economic system came to be controlled by the government as completely as that of Soviet Russia, though by different methods. The fascist economies also came to be planned economies, though the planning which took place was more opportunistic and less formal than that of Russia.

The Control of Industry. Strict governmental control over industrial production was, of course, a basic feature of the fascist economies. Long before these systems met their end, enterprisers in industry were being told what they could and could not produce; how much to produce of various goods; how many hours a week they could or should operate; whether they could replace machinery and equipment and, if so, at what prices; whether they could have any raw materials and, if so, how much and at what cost; whether they could import or export anything and, if so, in what quantities and at what prices; how many workers they could have, how many hours per day the workers could be employed, and what they should be paid; what prices could be charged for finished products, and a number of other things. Underneath this thick layer of governmental controls, industrial enterprises were still privately owned and operated, and were supposed to operate for profit as usual.

The control of production was accomplished through a complex network of governmental agencies constructed for the purpose. These agencies were so numerous and complicated that it does not seem worth while to study them in detail in a book of this kind, now that they have ceased to function. The control agencies normally included representatives of business enterprisers and the government, and sometimes admitted

workers' representatives as well. In drawing up the regulations which would govern production, attention was usually paid to the wishes of business men as well as those of the government. Once the regulations had received the approval of high governmental and party officials, they operated with the force of law on all enterprises subject to them. Since productive enterprises were still privately owned and operated, they still required the stimulus of "profits," and the regulation of production was usually so contrived that business men could make plenty of money, though governmental control over production was complete.

The Control of Agriculture. Fascist production controls extended to agriculture as well as industry. Production, price, and marketing controls were exercised through agencies similar to those for industrial control. Programs of land reclamation and resettlement were undertaken, the movement of labor into and out of agriculture was controlled, subsidies in cash or kind were paid to the growers of various crops, and the prices of some products were raised in an effort to stimulate production under the self-sufficiency program. In Germany an effort was made to provide a new status for deserving farmers; that is, if the farms and their owners qualified for the honor, the farms could be made hereditary and inalienable, and not subject to sale, mortgage, or division, and the owners acquired the right to call themselves "Peasants."

The fascist farm policies undoubtedly contributed something to the state or national objectives of economic independence and preparedness for war, but they were of little benefit to the ordinary farmer. No really determined attack was made on many fundamental farm problems, such as tremendous concentration in the ownership of farm land, farm tenancy, and the great disparities in income and economic welfare which existed between poor and prosperous farmers. Even the increased prices of farm products brought no benefit to the ordinary farmers, who usually consumed all they were able to produce and even had to buy more in many cases. The government's subsidies, free labor, and other benefits for farmers also went primarily to the large farmers.

The Control of Marketing. In wholesaling, retailing, and other branches of marketing, the fascist government used control agencies and regulations similar to those employed in other fields, and the individual enterpriser was tied hand and foot in this field as elsewhere. The policies of economic self-sufficiency and preparation for war resulted in severe shortages of ordinary consumers' goods and a thoroughgoing system of rationing became necessary. This rationing program may have served to distribute fairly equitably among the citizens the burdens and hardships resulting from other fascist economic policies, but the rations made available to the people inevitably resulted in restricted consumption and lowered scales of living.

General systems of price control were also put into operation in the

fascist countries, and were undoubtedly necessary and desirable in view of the other economic policies which were being followed. However, since the price controls were imposed not on governmental enterprises but on private enterprises operated for profit, they operated none too efficiently and many devices for evading them were invented and adopted by business men. Among these were simple black-market dealings, combination sales, the upgrading of commodities, reductions in quality, reductions of quantities in packages, the multiplication of new products and brands, and concentration on the higher-priced varieties of goods. Thus, effective stabilization of prices occurred only in the official statistics or price indexes of the fascist governments, despite the severe penalties which were provided for violations of the price decrees.

The Control of Banking and Credit. Familiar control agencies and regulations appeared in the fields of commercial and investment credit and banking in the fascist countries. In commercial banking, individual banks were licensed and controls were imposed on interest rates, the sizes of loans which could be made to various firms and enterprises, and the size of bank reserves and the forms in which they should be held. Each banker was practically a state official as well as a private enterpriser, and was likely to have a party man to watch over and "protect" him at all times. When instructed by the government, and without regard for his own opinions and desires, he had to advise his customers to purchase government bonds or the securities of new concerns which were being set up to produce ersatz or substitute products under the national self-sufficiency program. He had to hold the official, optimistic view of state finances. He had to try to restrain individuals who wanted to withdraw their deposits for private uses, report those who did make large-scale withdrawals, and inform the government about individual customers who had large liquid balances.

In the field of investment credit and banking, there were also many controls. Interest rates on other securities were beaten down by the government in order to create a more favorable market for government bonds. The dividends which corporations were allowed to pay on their stocks were strictly limited. The earnings which the concerns were thus compelled to retain might be invested in the same lines of production if the corporations were producing articles which were of importance under the self-sufficiency or armaments programs. Otherwise, the government would "persuade" the corporations to invest their earnings in new companies which would contribute to such programs, or in government bonds which would place the funds directly at the disposal of the government for the same purposes. New security issues on the part of private industrial and business concerns were severely curtailed, and private firms were made to look to the government for investment funds. Firms producing ordinary consumers' goods were not allowed to sell new securities, could

not obtain additional investment funds from the government, and under price control were often unable to acquire adequate earnings of their own for purposes of reinvestment. Thus the entire investment-credit mechanism was brought under the thumb of the government and investment funds were diverted into fields of production which were deemed consistent with the attainment of national objectives.

The Control of International Trade. The governments of the fascist countries used every device in the books in their efforts to control the foreign trade of their countries. The methods employed included protective tariffs, import and export licenses and quotas, foreign exchange controls, export subsidies, private trading agreements, clearing agreements, payments agreements, direct intergovernmental barter deals, and other devices. However, the fascist countries did not maintain a very large volume of international trade on the basis of these controls, and soon turned to comprehensive programs for achieving national economic self-sufficiency. As we noted in Chapter 42, these self-sufficiency programs included increasing the production of articles which were already being made in the fascist countries in amounts inadequate for domestic needs, attempting to substitute articles which were relatively less scarce for others which were relatively more scarce, and producing artificial substitutes for articles which could not be produced in the fascist countries by natural methods. There are obviously no direct gains in terms of maximizing production and scales of living to be obtained from the curtailment of international trade and the development of national economic self-sufficiency. The most that can be said of these policies, as of other fascist control policies, is that they were apparently consistent with the national goals of independence and readiness for aggressive warfare.

The Control of Labor and Industrial Relations. Labor and the relations of workers and employers, like virtually everything else, came in for very rigorous control by the governments of the fascist countries. The fascist leaders wanted to maintain industrial peace in the interests of full production and they succeeded in doing so, but only at great cost to the workers, if not to the employers. All labor unions were smashed and liquidated, along with their headquarters, meeting halls, and publishing plants. Their newspapers were suppressed, and their funds taken over by the government. The workers were forced into government-inspired and -controlled organizations, headed by party men and interested primarily in seeing that the interests of the nation (as the fascist leaders saw them) did not suffer as a result of anything that went on in the field of industrial relations. The workers had no real right to bargain collectively with their employers. They were allowed to use none of the weapons of industrial conflict, such as strikes and picketing, to bring their desires forcefully to the attention of their employers. And the wages, hours, and working conditions which are so important to workers were determined,

except for the supervision and intervention of the government and its agencies, by the fiat of the employers and at their pleasure.

The employers were also deprived of their usual private organizations, they were called upon to give up their tried and true weapons and practices of industrial conflict, and they were subjected to many burdens by the government and the fascist party. However, except for governmental intervention, the employers still held the upper hand in their direct dealings with the workers because of their natural superiority of bargaining power. The equal treatment of parties unequal in strength still leaves them unequal in strength. The fascist governments made an effort to protect the workers from the rapaciousness of the employers through confidential councils, labor trustees, labor courts, and courts of social honor, but there is reason to suspect that these elaborate devices were far from completely successful.

The situation of the workers of the fascist countries with respect to wages, hours of work, and working conditions in general was not favorable even before World War II, and in the war period it became steadily worse. The famous (or infamous) work-books or labor passports, wages frozen at unsatisfactory levels, the conscription or drafting of workers of almost all kinds, the freezing of workers in their jobs, the application of military or semimilitary regulations to the workers, severe penalties for breaches of labor discipline, and the suspension of former legal restrictions on hours of work and other working conditions were all part of the order of the day in the fascist countries.

The workers were supposed to be compensated for these unfavorable conditions in a number of ways. First, they had the benefits of the *Dopolavoro* (After Work) and *Strength Through Joy* movements, through which the workers participated in low-cost vacation trips, sports, concerts, plays, operas, vaudeville and moving-picture performances, lectures, art exhibits, tours of museums and art galleries, and other recreational and educational events. However, they had almost no freedom of choice or conduct in their leisure-time activities and were the "beneficiaries" of a strong program of political education in these activities—which meant that plays, movies, concerts, operas, lectures, and other activities were all coordinated with the fascist philosophy. In the long run the workers themselves did much of the paying for the activities of *Dopolavoro* and *Strength Through Joy*, and these activities were regarded by the fascist leaders in part as a means of keeping the workers out of mischief in their spare time. The activities were also intended to keep the workers reasonably happy and contented, so that they would be easier to govern and more productive.

Second, the workers were supposedly compensated by the relative certainty of finding employment as the fascist systems moved through preparedness to war, but the satisfaction provided by full employment was

lessened by the prevalence of working conditions that approached slavery, and by lowered real incomes and scales of living. Third, the workers gained something under the systems of social security which the fascist governments maintained, although many people were not covered by some of the types of social insurance, the benefits received by the insured were often pitifully inadequate, and the cost of the insurance was borne to a great extent by the workers themselves. Finally, there was the joy the workers were expected to experience in realizing that they were a vital part of a national community which the fascist leaders contended was constantly growing in power and prestige. According to these leaders, the main issue with the workers was not their ridiculous wage-pennies or food and clothing, but rather the dignity and honor of their position. Such contentions require no comment here.

The Distribution of Income. In the fascist countries, the distribution of income remained distinctly of the capitalistic type. With productive wealth privately owned and most industries privately operated, individuals were allowed to receive rent, interest, and profits as well as wages and salaries. There was no tendency for the proportion of the national income going into wages, salaries, and other earned compensation to increase in relation to that going into profits, undistributed profits, interest and dividends, and rent. In fact, the tendency was in the opposite direction, and inequality in the distribution of income among persons increased. There was clearly no feature of the distribution of income in the fascist countries which could be regarded as a desirable accomplishment of fascism unless it was that great inequality in its distribution among individuals was not allowed to accomplish all of its usual evil results, since large portions of the incomes of all classes were taken by the government for its own purposes.

Evaluation of Fascism. The virtually complete governmental control over economic activity which developed in the fascist countries may have resulted in the elimination of some of the competitive wastes of capitalism, but any such gain was offset by an increase in bureaucracy and red tape; by countless regulations, forms, reports, and questionnaires; and by bribery, "wangling," and the necessity of worming into the good graces of fascist officials. The tendency toward industrial concentration and combination which the fascist governments sponsored may have improved the economic position of the surviving enterprises, besides simplifying the problems of governmental regulation and control. However, any joy which the large business men in fascist countries may have experienced at being relieved of their smaller competitors must have faded rapidly as the party leaders themselves went into business and used the powers of the one-party state for their own economic gain. The economic successes achieved by these party men were extraordinary, and the increases in their wealth and income were often compared with the loot and booty

of the robber barons. On the whole, however, there is little reason to think that the technical efficiency of production was lowered significantly under fascism.

Indeed, it may be said that the fascist system of economic control did not compare unfavorably with other systems of complete governmental control from the point of view of the technical efficiency of production and management. In other words, it appears that the fascist system of leaving the risks and responsibilities of operating economic enterprises to private individuals and stimulating these persons by means of competition and the prospect of private profit, while making sure, through governmental controls, that the total economic results produced were appropriate to national goals, may have produced better results on the whole than the Russian system of outright governmental ownership and operation.

However, the results of fascism in terms of efficiency were far from adequate to justify the existence of such a system. Instead of merely maintaining efficiency, a fascist system would have to show tremendously superior efficiency, and a disposition to allocate the results of such efficiency to increasing the economic welfare of the people, before it could make up for the almost complete loss of political and economic freedom which its operation entails. Actually, with no remarkable gains in production, and with an ever-increasing portion of the national income being devoted to the ends of the state rather than to consumption by the people, the loss of political and economic freedom led only to lowered real incomes, reduced scales of living, and hardship and suffering.

Such great sacrifices on the part of the people might conceivably have been justified if the ends sought by the fascist states had been noble and humane. Actually, however, the general goal which the fascist countries were seeking—that of attaining national power and glory by means of economic independence and aggressive warfare—was both monstrous and inhumane. It is doubtful that the most persuasive of leaders could have kept the people of the fascist countries devoted to and enthusiastic about such an objective, if the government had been democratic and responsible to the people. In practice, of course, the objective in question was forced on the people by a strong dictatorial government which controlled almost every phase of their daily lives. And, in the end, the efforts of the fascist governments to reach their objective resulted in dismal failure. Fascism in Italy was unable to produce an economy and a nation which was strong even in time of war. In Germany, on the other hand, an effective war economy was unquestionably developed, but it proved entirely inadequate for the task of world conquest without which the gains that immediately resulted from military conquest could not be retained.

1. How were the governments of the fascist countries changed in the process of creating dictatorships? Explain.
2. Explain the principal characteristics of the ruling political party in the fascist countries.
3. What happened to the rights and liberties of the individual citizens under the fascist government?
4. How was opposition to fascism suppressed?
5. "In the fascist countries, the program for the suppression of opposition had a strong racial tinge." Explain.
6. What was the fascist theory with regard to the relations of individuals and the state? Explain.
7. Discuss the nature and significance of the economic institutions of fascism.
8. How and to what extent did the governments of the fascist countries control industry?
9. Explain fascist policies and accomplishments in the field of agriculture.
10. Why is it often said that fascist attempts to control prices were not conspicuously successful?
11. Outline fascist policies in the field of commercial and investment credit and banking.
12. "The fascists used practically every known device in controlling the international trade of their countries." Explain.
13. Why is it often said that the fascist countries reduced the status of labor virtually to the level of slavery? Explain.
14. How were the workers supposed to be compensated for their lowly status under fascism? Explain.
15. What happened to the distribution of income under fascism?
16. Present a general evaluation of fascism.
17. Were the governments of the fascist countries successful in attaining their objectives? Give details.

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